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A CLASS BOOK
OF
MODERN GEOGRAPHY,

WITH
EXAMINATION QUESTIONS.

BY
WILLIAM HUGHES, F.R.G.S.,
PROFESSOR OF GEOGRAPHY IN QUEEN'S COLLEGE, LONDON ; AUTHOR OF "A MANUAL
OF GEOGRAPHY," ETC. ETC.

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PREFACE.

THE aim of the present volume is sufficiently indicated by its title, and prefatory remark is almost superfluous. The Author believes it calculated to occupy a place which is altogether distinct from that taken by any of his previous works on the subject.

The "Examination Questions" appended to each section of the book constitute, in the Author's estimate, one of the most valuable of its features. They are mainly designed, as the teacher will at once perceive, for oral use; and have been framed under the conviction that frequent oral examination—pursued with constant reference to Maps drawn upon a large scale—is the soundest test of a learner's advancement in geographical knowledge. But the greater number of them are equally adapted for the purposes of written examination.

The use which the Author would recommend to be made of these questions would be this:—That after *each* lesson gone through by the teacher, and professedly learnt by the pupils, the real amount of knowledge gained by the learner

should be tested by oral examination. Whether all of the questions that are here given should be proposed for answer, or only a selection of them, must depend upon special circumstances—of time and various appliances in aid of tuition—which differ in the case of one school from that of another, and of which the individual teacher is the most competent judge. But the use of the Map is indispensable, whatever the limits to which either lesson or examination may be restricted. In addition, the Author would, at not unfrequent intervals, apply the test of written examination. The added labour imposed upon the teacher, in the task of looking through the answers, will be amply recompensed by the certain test of progress thus afforded. The deficiencies of the one method of examination will be corrected by the other, and, when both are avowedly adopted, even the least diligent learner can hardly fail to feel the stimulus to some amount of individual exertion.

ISLINGTON, *September 16, 1859.*

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INTRODUCTION.

GEOGRAPHY is a description of the Earth; that is, an account of the Lands and Seas which constitute the surface of the Earth, with their respective Climates, Productions, and Inhabitants. Such a description involves, *firstly*, an account of the natural features of the earth's surface, and of the climate, minerals, plants, and various productions of the animal kingdom, which belong to the different regions of the globe; *secondly*, a description of the several countries into which the earth is divided, with the condition and pursuits of their inhabitants, and the localities of the principal towns in each.

The first of these two divisions is generally known as PHYSICAL GEOGRAPHY: the second is distinguished as DESCRIPTIVE (or POLITICAL) GEOGRAPHY. The two are intimately connected, and the whole subject of Geography may be most profitably studied by combining them as much as possible. For Physical Geography is chiefly valuable as it serves to show how the various natural phenomena of the Earth—its different climates, productions, and capabilities—affect the condition and pursuits of mankind. A very brief reflection suffices to show (even to the youngest learner) that such influences exist, and that they are attended by very important results. The people who live in a hot country are differently circumstanced from those who dwell in a cold country, and their modes of life will naturally be different, in many respects. They will be led to adopt a different kind of clothing, and their ordinary kinds of food—their houses, their out-door labours and amusements, with many other things—will be different in the one case from the other. In like manner, the habits, manners, and ideas of people who inhabit a mountainous and rugged country will present great differences from those which belong to the inhabitants of a level plain. So also, a people who

dwell on the borders of the sea will have habits and occupations differing in many ways from those of people who inhabit an inland region ; they will (to take one example only) be led to build ships, and thus to engage in maritime intercourse with other nations, which the inhabitants of an inland country can never do.

We shall see, as we proceed with our Geography, numerous instances of this close connexion between the natural condition and productions of different regions and the social state of their inhabitants. First, however, it is necessary to know the few general truths which are stated below, and to understand well the meanings of the terms that are employed in Geography.

1. The Earth is very nearly a globe in shape,—that is, it is round (like a ball or an orange). It measures about 25,000 miles round, and a straight line supposed to pass through its centre would be about 8000 miles long. The former of these measures is called the *Circumference* of the Earth, the latter its *Diameter*.

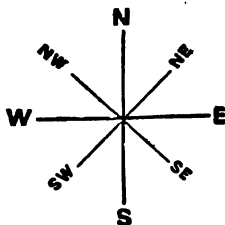
2. The Earth is constantly turning round, in a direction from west to east, upon an imaginary line, (called its *Axis*), which passes through its centre, and which therefore forms one of its diameters. This motion is the cause of day and night.

3. The extremities of the Earth's axis are called the *Poles* of the Earth. One of them is the North Pole, the other the South Pole.

4. A circle drawn round the Earth midway between the poles—that is, at exactly the same distance from each pole—is called the *Equator*. The Equator divides the globe into two halves, or *Hemispheres*—a Northern Hemisphere and a Southern Hemisphere. The northern hemisphere is that half of the globe which is between the Equator and the North Pole, and the southern hemisphere is the half that is between the Equator and the South Pole.

5. North, South, East, and West, are terms used to express the relative positions of places to one another. They are the four *Cardinal* (or chief) *points of the Compass*—an instrument used to determine the respective bearings of places. There are altogether thirty-two points of the compass—twenty-eight

of the number being intermediate between the four cardinal points. The point lying midway between north and east is called North-east; that midway between north and west is North-west. In like manner, the points lying midway between the east and west and the south points are called South-east and South-west.



6. A line drawn round the Earth in the exact direction of north and south—that is, passing through the poles, and crossing the equator at right angles—is called a *Meridian*. Such a line may be supposed to pass through any given place on the Earth's surface, (and may, of course, be actually drawn upon the surface of the artificial globe); it is then called the meridian of that place. Thus, a line drawn through London in the exact direction of north and south is called the meridian of London.

7. The positions of places on the Earth's surface are indicated by means of latitude and longitude. *Latitude* is distance in the direction of north and south. *Longitude* is distance in the direction of east and west. The amount either of latitude or longitude is expressed in degrees.

8. Every circle, whether great or small, is supposed to be divided into 360 equal parts, or *Degrees*. A quarter of a circle (or *quadrant*) contains, therefore, 90 degrees. *Latitude* is distance measured, in degrees, from the equator towards either pole. The greatest latitude which a place can have is 90 degrees—that is, the extreme distance of either pole from the line of the equator. All places situated between the equator and the north pole are said to be in North Latitude: all places that lie between the equator and the south pole are in South Latitude.

9. Longitude is distance to the East or West of any given meridian. It is measured half-way round the globe—that is,

180 degrees upon each side of any meridian—and is called *East Longitude* or *West Longitude* according as it is to the east or to the west of the meridian that is used. In England, we use the meridian supposed to pass through Greenwich, (near London), where our national observatory is situated. Hence we say that a place is so many degrees longitude east of Greenwich, or west of Greenwich.

10. Every degree is divided into sixty equal parts, called *Minutes*; and every minute is divided into sixty equal parts, or *Seconds*. The following signs are used to express degrees, minutes, and seconds—"°", "′", and "″". If it is necessary to express distances (either of latitude or longitude) which are less than a degree, we say that a place is in so many degrees, so many minutes, and so many seconds, using these signs. Thus, 24° 16′ 28″ means twenty-four degrees, sixteen minutes, and twenty-eight seconds: just in the same way that, in order to express an amount of money, we might say £24, 16s. 8d., that is, twenty-four pounds, sixteen shillings, and eight pence.

11. Circles drawn round the globe in a direction parallel to the equator are called *Parallels of Latitude*, (or simply *Parallels*). They are usually drawn upon artificial globes and maps at every ten (or sometimes every five) degrees apart. They serve to show, in a general way, the latitudes of various places. Places that are on (or near) the same parallel, have of course the same (or nearly the same) latitude.

12. Meridian lines—that is, lines in the exact direction of north and south—are also generally drawn upon globes and maps at distances either of five or ten degrees apart. They serve to show the longitudes of places. Places that are on (or near) the same meridian, have the same (or nearly the same) longitude.

13. Two circles drawn round the globe in a direction parallel to the equator, and at a distance of $23\frac{1}{2}^{\circ}$ from that line, are called the *Tropics*.* That drawn at $23\frac{1}{2}^{\circ}$ to the north of the equator is called the *Tropic of Cancer*: the similar circle drawn at $23\frac{1}{2}^{\circ}$ south of the equator is called the *Tropic of Capricorn*. These lines mark the further distances, on either side of the equator, within which the sun is vertical.

14. Two circles drawn round the globe in a direction parallel to the equator, and at distances of $23\frac{1}{2}^{\circ}$ from either pole, are

* Greek, *trepo*, I turn. Because the sun, in its apparent annual path through the heavens, turns back towards the equator when it has reached a point directly over the line of the tropic, or $23\frac{1}{2}^{\circ}$ on either side of the equator.

called the *Polar Circles*. The circle drawn at $23\frac{1}{2}^{\circ}$ from the North Pole is distinguished as the *Arctic Circle*. That drawn at $23\frac{1}{2}^{\circ}$ from the South Pole is called the *Antarctic Circle*. These circles mark the limits (from either pole) within which the sun remains wholly above the horizon for a term of more than twenty-four hours at one season of the year, or does not rise for a term of more than twenty-four hours at the opposite period of the year.

15. The Tropics and Polar Circles serve to divide the surface of the Earth into five *Zones*—one Torrid Zone, two Temperate Zones, and two Frigid Zones. The space lying between the Tropics is the *Torrid Zone*, which is the hottest part of the world, because there the sun is vertical—or directly over-head. The space comprehended between the Tropic of Cancer and the Arctic Circle is the *North Temperate Zone*; and the similar space between the Tropic of Capricorn and the Antarctic Circle is the *South Temperate Zone*. The space within the Arctic Circle (and surrounding the North Pole) is the *North Frigid Zone*; and the like space within the Antarctic Circle, surrounding the South Pole, is the *South Frigid Zone*. The Frigid Zones are the coldest parts of the globe, for there the sun is, during a portion of the year, wholly absent—not rising above the horizon for weeks (or months) in continuous succession. The Temperate Zones (as the word “temperate” implies) are neither so hot as the Torrid Zone, nor so cold as the Frigid Zones.

The surface of the Earth is divided into LAND and WATER. The Land occupies little more than one-quarter of the whole. Nearly three-fourths of the Earth's surface are covered by Water.

The following terms are used to denote various portions of the Land:—

1. A portion of land surrounded by water is called an *Island*.* Borneo, Madagascar, Iceland, Great Britain—any one of which may be readily found upon the artificial globe, or on the Map of the World—are examples of islands.

2. A portion of land *nearly* surrounded by water is called a *Peninsula*.† Italy, Greece, Florida, Arabia, are examples of peninsulas. Sweden and Norway (together) also present an example of a peninsula: so, too, do Spain and Portugal.

* Latin, *insula*, an island.

† Lat. *pene insula*, almost an island.

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and the Baltic

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 is called a *Watershed*,* or water-

Watershed.

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QUESTIONS.

Why?
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held.

Inland Sea. The Mediterranean* is the largest of inland seas. The Red Sea, between Africa and Asia, and the Baltic Sea, in the north of Europe, are other examples.

3. A *Gulf*, or *Bay*, is a smaller arm of the sea, indenting the land; as the Bay of Biscay, on the coasts of France and Spain, or the Gulf of Guinea, on the west coast of Africa.

4. A narrow arm of the sea, connecting two larger portions, is called a *Strait*. The Strait of Gibraltar, which forms the entrance of the Mediterranean; the Strait of Dover, which unites the seas on the eastern and southern coasts of England; and the Strait of Bab-el-Mandeb, at the entrance of the Red Sea, are examples. A broader arm of the sea is sometimes distinguished as a *Channel*; as the English Channel, between the coasts of England and France, and the Mozambique Channel, between the continent of Africa and the island of Madagascar.

5. A body of inland water, surrounded by land, is called a *Lake*. The lakes of Geneva and Constance, in Switzerland; Lake Ladoga, in Russia; and Lake Superior, in North America, are examples. Small lakes often occur in mountainous countries, their beds consisting of hollows or depressions in the land, in which the running waters have accumulated.

6. A stream of water running through the land is called a *River*; or, if of very small size, a *Rivulet*, or *Brook*. A river generally rises in high ground, and discharges its waters into the sea—sometimes passing through one or more lakes on its way. Almost every place has in its neighbourhood examples of small running streams, or brooks: the junction of several such brooks, so that their waters become united in a larger channel or water-course, forms a river. The Thames, the Severn, and the Shannon, in our own islands, are among the most prominent examples of rivers: the Danube and the Volga, on the continent of Europe, are instances on a larger scale.

7. A small stream which joins a larger river is called a *Tributary* (or an *Affluent*)† of the larger stream. Thus the small river Kennet, in Berkshire, is an affluent of the Thames; and the river Inn is an affluent of the Danube.

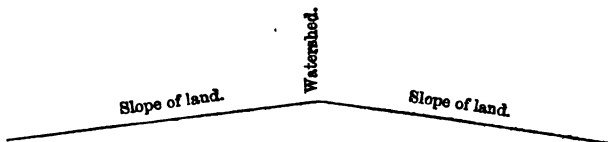
8. The whole tract of country which is watered by any river, with its tributaries, is called its *Basin*. Thus, we say, (in physical geography), the basin of the Thames, the basin of

* Latin, *medio terra*, i. e., in the middle of the land.

† Latin, *affluere*, to flow to.

the Danube—meaning thereby the whole district through which those streams, with all their affluents, respectively flow.

9. The ground which divides two adjacent streams that flow in opposite directions is called a *Watershed*,* or water-parting.



This generally (but by no means always) consists of a high tract of land, sometimes of a chain of mountains; and it is, in every case, formed by ground which is higher than that through which the streams actually flow, for the natural tendency of water is to run down a sloping ground, from a higher to a lower level. Some rivers, however, rise in ground which is nearly level, and at only a trifling height above the sea; and, in such cases, the watershed may consist of ground which does not exhibit any marked elevation above the adjoining plain.

EXAMINATION QUESTIONS.

1. What is the meaning of the term Geography?
2. What subjects are embraced within that portion of the study which is known as Physical Geography?
3. What subjects are included under the head of Descriptive (or Political) Geography?
4. Give an example of the way in which the physical geography of a country affects the condition and pursuits of its inhabitants.
5. What is the shape of the Earth, and what (in round numbers) are its dimensions?
6. What is the Axis of the Earth, and what are the extremities of the Earth's axis called?
7. In what direction is the Earth's motion round its axis performed, and what phenomena does this motion produce?
8. What are the Poles of the Earth, and how are they distinguished?
9. What is the Equator, and how does it divide the globe?
10. What is meant by the Points of the Compass? How many of them are there, and how are the four principal points named?
11. What is a Meridian?
12. What is Latitude, and in what is it expressed?
13. What is the greatest latitude a place can have?
14. What is Longitude, and from what is it measured?

* German, *wasser-scheide*.

15. How many degrees of longitude, upon either side of a given meridian, would measure half-way round the globe?
16. What are Parallels of Latitude, and what purpose do they serve?
17. What are Meridian lines, and what purpose do they serve?
18. What are the Tropics, and what do they serve to indicate?
19. What are the Polar Circles, and by what names are they distinguished in the opposite hemispheres?
20. How many Zones are there, and by what names are they distinguished?
21. Which of the Zones has the greatest amount of heat, and why?
22. Why are the Frigid Zones the coldest parts of the Earth?
23. What proportions do the Land and Water on the surface of the globe bear to its whole extent?
24. What is an Island, and from what is the term derived?
25. What is a Peninsula, and whence is the word derived?
26. Give some examples of islands, and find out their places either upon the Map of the World, or upon an Artificial Globe.
27. Name some examples of peninsulas, and point to their places on the map.
28. What is an Isthmus? Name some examples.
29. What is a Continent, and whence is the term derived?
30. How many continents are there? Name them.
31. Which of the continents belong to the Old, and which to the New World?
32. What is a Cape or Head? Give some examples of capes.
33. What is a Lowland? Name some examples of lowlands.
34. Explain the words Table-land, Highland, or Plateau, and name some examples.
35. What is a Hill, or Mountain, and of what does a Mountain-chain consist?
36. What is meant by the terms Mountain-pass, Ravine, or Defile?
37. What is a Valley, and what varieties of aspect do valleys exhibit?
38. What is a Desert? To what cause are deserts, for the most part, due?
39. What is the Ocean? Into what portions is the Ocean divided, and what are their names?
40. What is an Inland Sea? Name some examples of Inland Seas, and say which is the largest of the number.
41. What is a Gulf, or Bay? Name some examples.
42. What is a Strait?
43. Name the straits which lead, respectively, into the Mediterranean and the Red Sea.
44. What is a Channel? Name some examples, and find their places upon the Map of the World.
45. What is a Lake? Name some examples.
46. What is a River?
47. Name, as examples of rivers, three of the streams belonging to the British Islands, and also two of those on the Continent of Europe.
48. What are the small streams that join larger rivers called?
49. What is meant by the Basin of a river?
50. What is meant by the term Watershed?

EUROPE.

EUROPE, ASIA, AFRICA, AMERICA, AUSTRALIA, and POLYNESIA, are the six great divisions of the Earth. Five of the number, as we have already seen, are continents—that is, large masses of land: the last mentioned of them, Polynesia,* consists of a vast number of islands, which lie within the Pacific Ocean, and are surrounded by its waters. The Oceans themselves, which divide the different continents, and are of much larger extent than the whole of the land upon the surface of the globe, require to be described, and will be noticed afterwards.

EUROPE is (next to Australia) the smallest of the continents. It lies entirely within the northern hemisphere, and forms the north-western portion of the Old World.†

BOUNDARIES AND EXTENT.—Europe is bounded on the north by the Arctic Ocean; on the west by the Atlantic Ocean; on the south by the Mediterranean Sea, the Black Sea, and the chain of Mount Caucasus; and on the east by the river Ural and the range of the Ural Mountains. It measures about 2500 miles from north to south, and rather more than 3000 miles in its greatest dimensions in the direction of east and west. The whole extent of its surface is equal to 3,700,000 square miles.‡

* Greek, *polís nesos*, many islands.

† Europe, Asia, and Africa, which together form the Old World, are so called because they were known to the nations of antiquity. America, or the New World, was not discovered until a comparatively modern period—towards the close of the fifteenth century.

‡ A square mile is a space which measures one mile each way. It is in square miles that the size of countries is generally expressed. The whole surface of the globe is equal to 197 millions of square miles, nearly three-fourths of which are water.

In shape, Europe is very irregular. Its outline exhibits great many indentions, by means of which the waters of adjoining seas penetrate far within the general line of coast. This circumstance causes Europe to have a great extent of coast-line, in proportion to its size, than is possessed by either of the other continents.

INLAND SEAS, GULFS, AND BAYS.—The following inland seas belong to Europe :—the Mediterranean, Sea of Marmora, Black Sea, Sea of Azov, all situated in the south of Europe. The Baltic Sea, and the White Sea, in the north. The Caspian Sea, in the south-east, is really a vast lake.

The Mediterranean is the largest inland sea in the world. It includes the following gulfs and bays :—the Gulf of Lyons, Gulf of Genoa, Adriatic Sea (with the Gulfs of Venice and Trieste), the Gulf of Corinth, and the Archipelago.*

The Baltic Sea includes the Gulfs of Bothnia, Finland, and Riga.

On the west side of Europe, along the line of the Atlantic Ocean, are the following :—the North Sea (or German Ocean) the Zuyder Zee, the English Channel, and the Bay of Biscay. The North Sea lies between the coasts of Holland and Great Britain : the Zuyder Zee (which is a small inland sea on the shores of Holland) is an arm of the North Sea : the English Channel is between the shores of Britain and France : the Bay of Biscay indents the shores of France and Spain.

CHANNELS AND STRAITS.—The Skager-rack and the Kattegat, two channels which lead from the North Sea to the islands lying at the entrance of the Baltic ; the Sound, the Great Belt, and the Little Belt, three straits which lead from the Kattegat into the Baltic, between the Danish islands and the coasts of Sweden and Jutland.

The Strait of Dover, which connects the North Sea with the English Channel, and divides the coasts of England and France.

The Strait of Gibraltar, which forms the entrance of the Mediterranean. The Strait of Messina, which divides the island of Sicily from the Italian peninsula. The Dardanelles, a strait which leads from the Archipelago into the Sea of

* The ancient *Ægean* Sea, in Greek, *aiçaiç pelagos*, of which the modern name is a corruption. The word Archipelago has become applied as a general term to seas, which, like the Grecian archipelago (or *Ægean*), contain a great many islands ; and, by modern usage, to the islands themselves. Thus, we speak of the British archipelago, the East or West Indian archipelago, and so on.

Marmora. The Bosphorus, or Channel of Constantinople, which leads from the Sea of Marmora into the Black Sea; and the Strait of Kertch, or Yenikale, which connects the Black Sea with the Sea of Azov.

The Sound, the Strait of Gibraltar, the Dardanelles, and the Bosphorus, are the most important of these. The Sound, because it forms the most frequented channel of entrance to the Baltic Sea. The Strait of Gibraltar, because it is the only entrance to the Mediterranean. And the Dardanelles and Bosphorous, because they are the necessary channels of entrance to the Black Sea.

CAPIES.—The most northerly point of Europe is called the North Cape, (off the coast of Norway). The most southerly is the Point of Tarifa, in Spain. The most westerly is Cape Roca, in Portugal.

The other principal capes are,—the Naze, in Norway; the Skaw, in Denmark; Ortegal and Finisterre, in Spain; St Vincent, in Portugal; Trafalgar, in Spain; Spartivento and Di Leuca, in Italy; Matapan, in Greece.

PENINSULAS.—The following peninsulas belong to Europe:—Norway and Sweden, which together form the Scandinavian peninsula; * Jutland, which forms a portion of Denmark; Spain and Portugal, or the Spanish Peninsula; Italy; the Morea, which is part of Greece; and, lastly, the Crimea, which is a part of Russia.

Europe is distinguished by the great number of its peninsulas, the inhabitants of which enjoy naturally great advantages for maritime intercourse and traffic.

ISTHMUSES.—The Isthmus of Corinth, which joins the Morea to the mainland of Greece, and the Isthmus of Perekop, which unites the Crimea to the mainland of Russia, are the two principal.

ISLANDS.—Europe has a great number of islands, some of them situated in the Atlantic and Arctic Oceans, others in the Baltic, and others in the Mediterranean Sea. The most important among them are the British Islands, which include England, Wales, Scotland, and Ireland, and which lie off the western coasts of Europe, within the Atlantic Ocean. England

* Scandinavia was the ancient name of the countries lying on the western side of the Baltic Sea.

and Wales, with Scotland, together form the island of Great Britain, which is the largest of European islands. Iceland, which also lies in the Atlantic Ocean, but much further to the northward, is the second in point of size.

The islands situated within the Atlantic Ocean (naming them in order from north to south), are the following:—Iceland, the Faroe Islands, the British Islands, the Channel Islands (off the coast of France), and the Azores or Western Islands.*

The islands of Europe situated within the Arctic Ocean are Nova Zembla, Vaygatz Island, Kolgouev Island, Jan Mayen Island, and the Loföden Islands. Nova Zembla is really a very extensive group of islands, but is situated in so high a latitude as to be nearly (if not quite) uninhabitable.

The islands in the Baltic Sea are,—Zealand, Funen, and several of smaller size, which together form the Danish Archipelago, and lie at or near its entrance; with Rugen, Bornholm, Oland, Gothland, Oesel, Dago, and the group of the Åland Islands. The island of Zealand has on it Copenhagen the capital city of Denmark.

The islands in the Mediterranean are,—Sicily, Sardinia, Corsica, Candia, and Cyprus,† which are all of large size. Sicily is the largest, and Sardinia is second in point of magnitude. The smaller islands are Majorca, Minorca, and Iviza (which form together the Balearic Islands); Elba, off the west coast of Italy; the Lipari Islands, to the north of Sicily; Malta, south of Sicily; the Ionian Islands, to the west and south of Greece; and the numerous islands of the Archipelago, among which Negropont, or Euboea, is the most considerable.

EXAMINATION QUESTIONS.

1. How many great divisions of the Earth are there? Name them, and say which of them are continents.
2. Which of the continents form together the Old World, and why are they so called?
3. Name the boundaries of Europe, pointing them out upon the map.‡

* The Azores lie a long way out in the ocean, 900 miles to the west of Portugal, and hence too far off to be shown upon the map.

† The island of Cyprus is reckoned to belong to Asia.

‡ It is indispensably requisite that the latter direction should be complied with, in this and all similar cases. Everything in geography must be learnt *upon the map*, and by its aid. The facility—acquired by continual practice—of finding places upon the map, is the indispensable condition of geographical knowledge, in the only sound meaning of the term.

4. What (in round numbers) is the extent of Europe, in the direction of north and south, and also in that of east and west?
5. What is its area (or superficial extent) in square miles?
6. By what is the general shape of Europe distinguished, and what results from the circumstance?
7. Name the inland seas of Europe, pointing to each upon the map.
8. What gulfs and bays belong to the Mediterranean Sea? Point them out upon the map.
9. What gulfs belong to the Baltic Sea?
10. What seas, bays, and channels occur on the western side of Europe, along the line of the Atlantic? Point to each upon the map.
11. What countries does the Bay of Biscay adjoin?
12. What two channels lead from the North Sea to the entrance of the Baltic?
13. What three straits lead into the Baltic Sea?
14. What strait connects the North Sea with the English Channel, and what countries does it divide?
15. What strait forms the entrance of the Mediterranean Sea?
16. What strait divides the island of Sicily from the mainland of Italy?
17. Name the two straits that lead from the Archipelago into the Sea of Marmora, and from the Sea of Marmora into the Black Sea.
18. What strait connects the Black Sea with the Sea of Azov?
19. Among the various straits belonging to Europe, which four are the most important, and why?
20. Name the three capes which form the north, south, and westernmost points of Europe, pointing to each upon the map.
21. Name the other principal capes of Europe, with the country to which each belongs.
22. What peninsulas belong to Europe?
23. Name the two principal isthmuses of Europe, and find their places on the map.
24. Which are the most important among the islands of Europe, and by what name is the largest of them called?
25. What island is second in point of size? In what sea is it situated?
26. Name the European islands that are situated in the Atlantic Ocean. Point them out upon the map.
27. Name the islands that are in the Arctic Ocean. Which is largest among them?
28. What two islands lie at the entrance of the Baltic Sea?
29. What other islands belong to the Baltic?
30. Name, and point to, the five largest islands in the Mediterranean.
31. Enumerate the smaller islands of the Mediterranean.
32. What group of small islands lies near the north coast of Sicily?
33. What island is south of Sicily?
34. What is the name of the largest among the islands of the Archipelago?

MOUNTAINS.—Europe exhibits great variety of surface. The southern parts are mountainous. The middle parts are less elevated, but may be considered as hilly. The north-western peninsula (Norway and Sweden) also contains high mountains. But the whole of eastern Europe consists of a vast plain, nearly level, or only diversified by very slight elevations.

The highest mountains in Europe are the Alps, which extend

round the north of Italy, and divide that country from France, Switzerland, and Germany. All the upper portions of the Alps are covered with snow, which, owing to the intense cold resulting from their great elevation, never melts. The loftiest mountain among the Alps bears the name of Mont Blanc; it is on the borders of Savoy and Piedmont, and within the kingdom of Sardinia. Mont Blanc reaches the great height of 15,700 feet (or nearly three miles) above the sea.

The Apennines are a chain of mountains which branch off from the Alps, and extend through nearly the whole length of Italy. They are much less elevated than the Alps.

The Balkan Mountains are in Turkey. They form a chain extending from the Black Sea westward towards the Adriatic, where they become united to the eastern offsets of the Alpine system of mountains. From the Balkan Mountains, a chain called Mount Pindus extends to the southward into Greece.

The Pyrenees are a chain of mountains which divide France and Spain. The highest amongst them reaches more than 11,000 feet above the sea. The Pyrenees are covered with perpetual snow in their higher portions. Many other mountains occur in the Spanish peninsula: the highest among them are the Sierra Nevada, which are in the south of Spain, near the Mediterranean coast, and are nearly as lofty as the Pyrenees.

The Alps, the Apennines, the Balkan Mountains, the chain of Mount Pindus, the Pyrenees, and the Sierra Nevada—all belong to the *south* of Europe, and are not far distant from the shores of the Mediterranean.

The countries of middle and western Europe include the Carpathian Mountains (in the eastern part of the Austrian Empire), the Mountains of Germany, and the Mountains of central France. None of these are so elevated as the mountains of southern Europe.

The Scandinavian peninsula, in the north-west of Europe, includes a long chain of mountains stretching through Norway, and lying close along the shores of the Atlantic Ocean. The highest portion of these is called the Dovre-field.

The Dovre-field and other mountains of Norway are very much less elevated than the Alps, but, owing to the higher latitude in which they are situated, and the consequently greater cold of the climate, their higher portions are covered throughout the year with snow.

The Ural Mountains, on the border of Europe and Asia, form a long chain, but are of very moderate height. Mount Caucasus, in the south-east, is a long and very high mountain-chain extending between the Black and the Caspian Seas, and is also on the border of Europe and Asia.

The principal mountain-chains of Europe, with the countries in which they are situated, are recapitulated in the following list :—

The Alps.....	on the borders of Italy, France, Switzerland, and Germany.
The Apennines.....	in Italy.
The Balkan.....	in Turkey.
Mount Pindus.....	in Turkey and Greece.
The Pyrenees.....	between France and Spain.
The Sierra Nevada.....	in Spain.
The Carpathian Mountains.....	in the Austrian empire, between Hungary and Galicia.
The Mountains of Germany.....	in Prussia, Bavaria, Saxony, Hanover, Baden, &c.
The Mountains of France.....	in the centre and east of France.
The Dovre-field, &c.....	in Norway.
The Ural Mountains.....	in Russia, on the border of Europe and Asia.
Mount Caucasus.....	in Russia, also on the border of Europe and Asia.

PLAINS.—All the east of Europe is a great lowland, or plain. This plain includes nearly the whole of Russia. It also stretches along the southern shores of the Baltic, and thence to the coast of the North Sea—including part of Prussia, with Northern Germany, Denmark, and Holland. This vast extent of level country is so much greater than is met with in any other part of Europe, that it may be called the Great Plain.

The other plains of Europe are the following :—

The Plain of Hungary.....	within the eastern part of the Austrian empire.
The Plain of Wallachia and Bulgaria.....	in the north of Turkey.
The Plain of Lombardy.....	in the north of Italy.
The Plain of Languedoc.....	in the south of France.
The Plain of Bohemia.....	in Central Germany, and within the Austrian empire.

RIVERS.—A large number of the rivers of Europe discharge their waters into inland seas. The largest of all, the river Volga, runs into the Caspian Sea, which has no outlet: its waters, therefore, never reach the ocean. The Volga, however, with its numerous tributary streams, waters a large portion of the great plain of eastern Europe, and is one of the chief highways of commerce to the Russian empire.

The second longest among the rivers of Europe is the Danube, which flows into the Black Sea. The river Dnieper,

which comes third in order of length, also enters the Black Sea. The next in order of length is the Don, which flows into the Sea of Azov.

The Volga, Danube, Dnieper, and Don, with numerous other streams, belong chiefly to the eastern side of the European continent. The longest and most important river of western Europe is the Rhine, which flows into the North Sea.

Every part of this continent is watered by running streams, the greater number of them navigable for long distances inland. Many of them form good harbours at their mouths. In these respects, indeed, Europe is unsurpassed by any of the divisions of the globe.

The principal rivers of Europe are here named in the order of the seas into which their waters are discharged, with the countries through which they flow :—

Into the White Sea.

Northern Dvina, Russia.
Onga, Do.

Into the Baltic Sea.

Neva, Russia.
Southern Dvina, Do.
Niemen, Russia, Prussia.
Vistula, Poland, Prussia.
Oder, Prussia.
Tornea, }
Lulea, }
Pitea, } Sweden.
Umea, }
Indala, }
Dal, }

Into the Caspian Sea.

Volga, Russia.
Ural, Do.

Into the Mediterranean and its Gulfs.

Ebro, Spain.
Rhône, Switzerland, France.
Arno, Italy.
Tiber, Do.
Po, Do.
Adige, Do.
Maritza, Turkey.

Into the Black Sea.

Danube, { Germany, Hungary,
 Turkey.
Dniester, { Austrian Poland,
 Russia.
Dnieper, Russia.
Do.

Into the Sea of Azov.

Don, Russia.

Into the Arctic Ocean.

Petchora, Russia.

Into the North Sea, or German Ocean.

Glommen, Norway.
Göta, Sweden.
Elbe, Germany.
Weser, Do.
Rhine, { Switzerland, Ger-
 many, Holland.
Meuse, { France, Belgium,
 Holland.
Scheldt, Do. do.
Thames, England.
Humber, Do.
Tweed, Scotland.

Into the English Channel.

Seine, France.

Into the Bay of Biscay.

Loire, France.
Garonne, Do.

Into the Atlantic Ocean.

Minho, Spain, Portugal.
Douro, Do.
Tagus, Do.
Guadiana, Do.
Guadalquivir, Spain.

Shannon, Ireland.

Many of the above rivers have their origin in high mountain-districts, at considerable elevations above the level of the sea. This is the case with the Rhine and the Rhone, both of which rise in the snow-covered Alps. The rivers of Spain and Portugal, again, derive their waters from the high regions in the interior of the Spanish peninsula. But this is not uniformly the case with rivers, some of which (and those among the most considerable) rise in nearly level plains, and at only a trifling height above the sea. The source of the Volga is in the midst of the great plain, at a height of little more than 600 feet.

Among the rivers named in the foregoing list, the following derive their waters from the Alps:—the Rhine, Rhone, Po, and Adige.

The Apennines contain the sources of the Tiber and the Arno.

The mountains of Germany give rise to the following:—the Danube, Elbe, and Weser.

The three following have their sources among the Carpathian Mountains:—the Dniester, Oder, and Vistula.

The Pyrenees contain the source of the Garonne.

The other mountain-chains and highlands of the Spanish peninsula give rise to the Minho, Douro, Tagus, Guadiana, and Guadalquivir.

The mountains of Central France, with the adjacent plains of that country, contain the sources of the Loire, Seine, and Meuse.

The Scandinavian Mountains (Dovre-field, &c.) give rise to the Tornea, Lulea, Pitea, Umea, Indals, Dal, Glommen, and Göta.

The river Ural rises in the Ural Mountains.

The river Kouban rises in Mount Caucasus.

The following rivers originate in the great lowland-plain of Europe:—the Volga, Don, Dnieper, Southern Dvina, Niemen, Northern Dvina, and Petchora.

LAKES.—The Caspian Sea, which lies on the borders of Europe and Asia, is really a vast lake—so great in size as to deserve the appellation of sea. Its water, moreover, is salt, like that of the open sea. Even small lakes, however, which, like the Caspian, have *no outlet* for their waters, are usually salt. But the water of lakes in general is sweet and fresh.

The current which is produced by the issue of a running stream from the lower end of a lake tends to preserve this freshness. A great many lakes (indeed, the greater number) both receive and discharge a running stream. Thus, most of the European lakes occur in the courses of its rivers; the river entering the lake at the upper end of its basin, and re-issuing at its lower extremity. The lake of Geneva, in Switzerland, offers an example of this in the case of the river Rhone; as does the lake of Constance (in the same country) in the case of the river Rhine. The Rhone enters the upper extremity of the lake of Geneva, as the Rhine does that of the lake of Constance; and in each instance the stream re-issues from the lower end of the lake.

The lakes situated in the south of Europe occur within mountainous tracts of country, and are hence surrounded by very varied scenery—often in the highest degree beautiful. Those that belong to northern Europe lie mostly in the neighbourhood of the Baltic Sea, and are generally within level regions. Lakes Ladoga and Onega, in Russia, with Wener and Wetter, in Sweden, greatly exceed any others in size, and Ladoga is the largest of the number.

The names of the principal lakes, with the countries in which they are situated, are as follow:—

Ladoga,	Russia.	Geneva,	Switzerland.
Onega,	Do.	Constance,	Do.
Saima,	Do.	Neufchatel,	Do.
Peipous,	Do.	Lucerne,	Do.
Enara,	Do.	Zurich,	Do.
Bieloe,	Do.	Garda,	Italy.
Ilmen,	Do.	Maggiore,	Do.
Wener,	Sweden.	Como,	Do.
Wetter,	Do.		
Maelar,	Do.	Windermere,	England.
Miösen,	Norway.	Ulleswater,	Do.
Balaton, or Platten	Hungary.	Coniston,	Do.
See,		Lomond,	Scotland.
Neusiedler See,	Do.	Neagh,	Ireland.

EXAMINATION QUESTIONS.

1. Which parts of Europe are generally mountainous, and which level?
2. Which are the loftiest among the mountain-chains of Europe, and what is the name of their highest summit?
3. In what countries are the following mountain-chains:—the Apennines, the Balkan Mountains, the Pyrenees, and the Sierra Nevada?
4. What mountain-systems occur in the middle parts of Europe?

5. What two mountain-chains occur on the borders of Europe and Asia, and which of the two is the loftier?
6. Point out on the map the places of the following, and name the countries in which they occur:—the Carpathian Mountains, the Dovre-field, and the chain of Pindus.
7. Mark out on the map the general extent of the great lowland-plain of Europe, naming the countries that fall within its limits.
8. Point on the map to the following:—the plain of Lombardy, the plain of Languedoc, the plain of Hungary, and the plain of Bohemia.
9. Name the longest among the rivers of Europe, and the sea into which it flows.
10. What rivers rank second, third, and fourth, in respect of length, and into what seas do they flow?
11. Which among the rivers of western Europe is longest, and first in order of importance?
12. What two rivers flow into the White Sea? Point them out upon the map.*
13. Name the rivers that flow into the Baltic Sea.
14. Which of them belong to Sweden, and which to Russia?
15. What two rivers fall into the Caspian Sea?
16. Name the rivers that flow into the Mediterranean, with the countries to which they belong.
17. Which of the rivers of Europe discharge into the Black Sea, and through what countries do they flow?
18. What river flows into the Sea of Azov?
19. What river flows into the Arctic Ocean?
20. Name the rivers that flow into the North Sea.
21. Which of the number (among those referred to in the last question) flow, either wholly or in part, through Germany?
22. Which of them belong to the British Islands?
23. What river flows into the English Channel, and through what country?
24. Name the two rivers that flow into the Bay of Biscay. Point them out upon the map.
25. What rivers of Europe have a direct course into the Atlantic Ocean?
26. Which among the rivers of Europe rise in the Alps?
27. Which in the Apennines?
28. What rivers originate in the Mountains of Germany?
29. In what mountains do the following have their origin:—the Garonne, Vistula, Tagus, Duister, Kouban, and Ural?
30. Name the rivers that rise in the great lowland-plain of Europe.
31. By what peculiarity are the waters of the Caspian Sea distinguished?
32. What distinguishing feature (as to situation) is there between the lakes of southern Europe and those that belong to its more northerly latitudes?
33. Name the lakes that are situated in Russia.
34. Name those that lie within the Scandinavian peninsula. Point them out upon the map.
35. Name the lakes that belong to Switzerland.
36. Name those that are within the limits of Italy.
37. What two lakes belong to Hungary?
38. Name the five principal among the lakes belonging to the British Islands.

CLIMATE AND NATURAL PRODUCTIONS.—Nearly the whole of Europe falls within the North Temperate Zone. The small portion lying to the northward of the Arctic Circle does not

* In pointing out a river's course upon the map, the pupil should be taught, in all cases, to trace the river *downward*,—from its source towards its mouth.

comprehend more than one-seventeenth part of the entire continent. Upon the whole, therefore, the climate of Europe is distinguished by its freedom from the extremes of heat and cold to which other divisions of the globe are subject.

There is, however, considerable difference between the climate experienced in the north of Europe, and that which characterises its southerly regions—between the cool atmosphere that is found upon the shores of the Baltic and the coasts of the Atlantic, and the warmth that belongs to the lands bordering the Mediterranean Sea. There is a gradual diminution of heat in passing from south to north, or from lower to higher latitudes. In other words, the countries of southern Europe are hot, those of middle Europe moderately warm, its more northerly regions cool, and the extreme north intensely cold.

This is in accordance with the general laws by which climate is regulated. The hottest parts of the globe are those to which the sun is vertical,* and the amount of heat which the sun's rays communicate becomes gradually lessened as they are received in a direction which is more and more slantwise, or oblique. Hence the greater heat of countries which are situated within the tropics, and which receive the burning rays of the mid-day sun from directly over-head. With every excessive parallel of latitude in the temperate zones, the angle at which the rays of the mid-day sun meet the earth becomes further removed from the perpendicular, and the cold is proportionately increased.

But the amount of solar heat also varies greatly with the situation of the sun to the north or to the south of the equator—that is, with the sun's *declination*.† At the period of our midsummer, the mid-day sun reaches a much higher place in the heavens than at the opposite season of the year ;

* It is only within the torrid zone that the sun is ever perfectly vertical. The tropics, it will be remembered, mark the limits, north and south of the equator, of the sun's apparent yearly path in the heavens.

† *Declination* is the angular distance of the sun's place in the heavens from the line of the equator, and is expressed (like latitude) in degrees, minutes, and seconds. It corresponds, in astronomy, to the word *latitude* in reference to places upon the earth's surface. The greatest solar declination is $23\frac{1}{2}$ degrees (or, more exactly, $23^{\circ} 28'$), since, when the sun has reached that distance upon either limit of the torrid zone, he returns on his course towards the line of the equator and the opposite tropic. At its extreme north declination, the sun is vertically over the Tropic of Cancer : at the like place, in the southern half of its course, over the Tropic of Capricorn. The former constitutes, to the inhabitants of the northern half of the globe, the *summer* tropic : the latter, the *winter* tropic.

and his rays hence give to us a greater amount of heat. The sun's declination—which is always marked by his meridian (or mid-day) place in the sky—varies from day to day, reaching its extremes with the sun's passage from the northern to the southern tropic, or from our mid-summer to our mid-winter. So also does the number of hours during which the sun is above or below the horizon—that is, the respective length of day and night—vary from day to day. At all places in the northern hemisphere, the longest day is when the sun has reached his extreme northern declination, or is over the Tropic of Cancer; and the shortest day occurs when the sun is at the opposite extreme of south declination. Precisely the reverse is the case in the southern half of the globe. *There*, the Tropic of Capricorn is the summer, and the Tropic of Cancer the winter tropic.

During the intervals of the sun's passage between the summer and winter tropics, the respective length of the days and nights undergoes a progressive change, and this change is more marked in high than in low latitudes—that is, it becomes greater as we recede further from the neighbourhood of the equator toward the poles. While the sun is passing from the Tropic of Cancer towards the southern hemisphere, the *days* (that is, the hours of daylight, or the period during which the sun is above the horizon)* are decreasing in length at all places within the northern half of the globe, and the nights (or hours of darkness) are increasing in duration. With the returning course of the sun from the line of the winter tropic towards the northern sky, the days (at places within the northern hemisphere) continually increase in length, and the hours of darkness undergo a correspondent decrease.

The long days and short nights of the northern summer, and the reverse conditions (long nights and short days) of the opposite season, are a material element in the climates of European countries. They are of less importance in the extreme south of Europe than in its higher latitudes, for *there* the difference between the extreme length of the long days of summer and the short days of winter is much less than it is further north. This difference becomes greater with each succeeding degree of latitude. At Naples, or at Lisbon, the difference between the length of the longest and shortest

* The horizon is the line marking—in an open plain, or on the sea-shore, where the view is unimpeded by any intervening object—the furthest limit of vision, where the sky appears to meet, and rest upon, the earth or the sea.

days is not more than 6 hours : at London, it amounts to nearly 9 hours. In the Shetland Islands, the difference becomes increased to nearly 13 hours ; and the same at Stockholm and St Petersburg, which are nearly in the same latitude as the Shetland Islands. Still further north, under the line of the Arctic Circle, the longest day, and the longest night, are each of exactly 24 hours' duration. Beyond the Arctic Circle the difference becomes yet greater, the summer sun remaining continuously above the horizon for a period of several successive days, while during the winter the sun does not become visible (remaining beneath the horizon) for a correspondent time. Summer in these high latitudes embraces therefore a brief period of continuous daylight, while the opposite season includes a period of correspondent darkness.

During the whole time that the sun is above the horizon at any place, his rays communicate heat to the earth. In the south of Europe, where (so far as this portion of the globe is concerned) there is least difference between the length of the days and nights throughout the year, the solar heat is more equally distributed, and the difference between the summer and winter temperatures is accordingly less marked than is the case further north. In the middle belt of Europe it gradually becomes more considerable, and the opposite seasons of summer and winter present more striking contrasts of heat and cold. The intervening seasons of spring and autumn, however, make the transition from the one extreme to the other gradual, and, indeed, measured merely from day to day, almost imperceptible. Further to the northward, the summer becomes a brief period of great heat (due to the long-continued presence of the sun above the horizon), the winter a prolonged and more definitely marked season of cold. The intervening seasons—spring and autumn—are periods of mere rapid transition from heat to cold, or the reverse : as the long days of summer approach, the heat rapidly increases, and the icy covering of the ground gives place with startling rapidity to the verdure which accompanies the warmth of prolonged sunshine. Summer as quickly passes, with returning periods of lengthening darkness, into the gloom of an arctic winter.

The south of Europe is thus a region of comparatively equable temperature, with seasons which are less distinguished by the heat and cold of summer and winter, or the intervening terms of spring and autumn, than by the alternate recurrence of periods of rain and drought.

The countries of middle and western Europe enjoy a climate in which the summer and winter are marked by greater contrasts of heat and cold than is the case further south, but in which the spring and autumn constitute seasons of gradual transition, and soften the passage from the one extreme to the other.

The countries of northern (and also of eastern) Europe exhibit, between their summer and winter, differences which are yet more strongly contrasted. Spring and autumn are there of brief duration: towards the extreme north, indeed, they can hardly be said to exist. The year is divided into a short summer, and a long winter. The former is, for a brief time, a period of great heat; as the latter is one of intense cold. The extremes of difference increase with the latitude, until, beyond the Arctic Circle, the year consists of a long winter night, alternating with a short season of continuous daylight and intense heat.

The countries of western Europe enjoy conditions of climate which possess many advantages over those belonging to the east of Europe in similar latitudes. They have a more equable distribution of heat throughout the year. That is, they enjoy milder summers and more temperate winters than is the case in eastern Europe. This is a consequence of their position relatively to the Atlantic Ocean.

The effect produced by large bodies of water upon climate is always to equalise it. Water preserves, under all circumstances, a more equal temperature than land. The sea never becomes so hot, under the influence of mid-day heat, as the land does; and when the heating influence is withdrawn (as at night) it never becomes so cold. In like manner, the heat of summer and the cold of winter produce less extreme effects upon the waters of the ocean than they do upon the large expanses of land which belong to either continent. Countries situated near the ocean share in the advantages of this more equable distribution of the solar heat. The vapours that float over the Atlantic Ocean communicate their moderate warmth (and also their moisture) to the atmosphere of the adjacent lands. The generally mild winters of the British Islands, and also those of the Norwegian coast, are due to this cause.

The eastern parts of Europe, on the other hand, are far removed from oceanic influences, and are, moreover, open and unsheltered. No mountain-chains protect them from the

piercing cold of northerly winds. Hence their summer is one of intense heat, and their winter a season of still intenser cold. Moscow and Edinburgh are situated in nearly the same latitude, but they possess widely different climates.

The comparative elevation of the ground has a great deal to do with climate. As we rise above the average level of the earth's surface, the air is well known to become progressively colder. This is found on climbing to the top of any hill—or even in reaching the higher portions of any moderately-elevated land. The tops of very high mountains are nearly always covered with unmelting snow—a consequence of the excessive cold of the air in those elevated regions. The higher portions of mountainous countries are therefore exposed to greater cold than their lower plains. High plateaus, or table-lands, for a like reason, are subject to extremes of temperature. The climates of countries upon opposite sides of the same mountain-chain are often widely different. The Alps, in the south of Europe, are an example. Their slope, on the side of Switzerland, is to the northward: upon that of Italy, to the southward. They serve in some degree to shelter Italy from the cold winds of the north.

A greater quantity of rain falls in the south of Europe than in its middle portions, and more in its middle latitudes than further north. Warm countries, in general, have more rain than cold countries. More rain falls also in the west of Europe than in the east—a consequence of its proximity to the Atlantic Ocean, the winds blowing from which are abundantly charged with moisture. Along the whole western side of Europe (including the British Islands) westerly winds are generally accompanied by rain, while easterly winds—blowing from over large tracts of land—are dry.* But the average number of days in the year upon which rain occurs is fewest in the south of Europe, and increases towards the north. There are more rainy days in the year in the west of Europe than in any other portion of its extent, and there is also a more generally moist atmosphere.

* All the moisture contained in the air, and precipitated upon the earth in the form of rain, hail, snow, &c., is originally derived (by the process called *evaporation*—that is, the conversion of water or any fluid into vapour) from the sea, or else from surfaces of inland water. Countries near large bodies of water are hence more like to possess a moist atmosphere than countries lying far inland. The winds carry the moist vapours of the sea over the adjacent lands, when they become condensed, and are discharged in the form of rain.

METALS AND MINERALS.—The natural productions of the earth form three great classes—mineral, vegetable, and animal. To the first belong the different metals (gold, silver, copper, iron, &c.), and the various mineral substances—including coal, salt, the various earths, as well as marbles, building-stones, and slates. The second class includes all the productions of the vegetable world, from the largest trees of the forest to flowers and plants of the minutest size, as mosses and lichens. And the third embraces the infinite varieties of animal life—the inhabitants of the land, sea, and air alike. In the last division, the lowest place is occupied by the insect world; next in order come fishes, and then, successively, reptiles, birds, and the various land animals, the highest of all being man himself.

It is the characteristic of Europe to possess among its natural productions an unusually large proportion of such minerals, plants, and members of the animal kingdom as are most useful to civilised man. Some of the plants and animals that are now abundant in Europe have been brought from other parts of the globe, but a large proportion are native to its soil. Other divisions of the earth possess in greater quantity the precious metals, display a vastly richer abundance of fruits and flowers, with trees of more luxuriant growth, and forests of wider expanse; or are rich in the various tenants of the wilderness and the air, in the size and powers of their wild animals, and the brilliant plumage of the feathered tribes. But no other part of the earth equals Europe in the abundant possession of what is most capable of supplying, with the due exercise of industry, the intelligent wants of man.

The following metals and minerals occur in various parts of Europe:—

Gold, in Hungary and Russia.

Silver, in Hungary, various parts of Germany, and also in Norway and Spain.

Platinum, in Russia.

Quicksilver, in Spain, Austria, Bavaria.

Iron, in Great Britain, Belgium, France, Russia, Sweden and Norway, and various parts of Germany.

Copper, in Great Britain, Russia, Sweden and Norway, Hungary, Germany, Spain.

Lead, in Great Britain, Spain, Austria, Hungary, Germany, and France.

Zinc, in Great Britain, Belgium, Germany.

Tin, in England and Spain.

Coal, most abundantly in Great Britain and Belgium, in smaller quantity in France, Germany, Russia, Sweden, and Hungary.

Salt, in Russia, Austrian Poland, England, France, Spain, Portugal, Germany, Italy, &c.

VEGETATION.—All the food-plants that are characteristic of the temperate zone thrive in this division of the globe. Wheat, barley, rye, oats, are grown abundantly over the larger portion of Europe, and maize (or Indian corn) in the more southerly division of the continent. Among fruits, the apple, pear, plum, cherry, currant, and gooseberry, belong to the middle latitudes of Europe: the vine to its more southwardly regions: the orange, lemon, citron, and fig, to the shores of the Mediterranean. Of trees, the countries lying to the south of the Alps and the Pyrenees are distinguished by the abundance of evergreens: while the forest-growth of middle and northern Europe is chiefly *deciduous*,* embracing such trees as the oak, ash, beech, elm, larch, willow, alder, maple, sycamore, and the various pines and firs.

ZOOLOGY.—Many of the wild animals which were once native to Europe have disappeared, while others have greatly diminished in number. The wild boar and the bear, as well as the wolf, were formerly common in the forests of the British Islands, but have been wholly exterminated thence. The forests of Germany, and the wooded tracts that skirt the Alps and the Pyrenees, still harbour, however, the two former; and the wolf is yet abundant in many parts of the continent—as in the forests of Russia, France, and Germany. The wild ox still exists in the forests of Russia.

But the vast number of domestic cattle that are reared in Europe—either as the food of man, or for various other uses—are its most striking feature in this respect. The sheep, ox, pig, and goat—the horse, ass, and dog—abound in every part of Europe; most of them are, indeed, the uniform companions of man, wheresoever his wanderings extend. The reindeer supplies to the inhabitants of the extreme north of Europe (Lapland) the place of other domestic quadrupeds.

* Deciduous trees are those which cast their leaves annually (from the Latin *decidere*, to fall).

The red-deer, the fallow-deer, and others of the same tribe, belong to the lower latitudes of middle Europe. The chamois and the ibex (animals of the goat kind) are native to the high mountain-region of the Alps, but they have become scarce under the continued pursuit of the hunter, and the latter is almost extinct.

The variety of birds is great in nearly every European country, except the extreme north. The web-footed tribes (geese, ducks, &c.) are most numerous in high latitudes. The stork, the crane, the heron, the pelican, the spoonbill, and the flamingo, belong to the west and the south of Europe. The vulture and eagle tribe are most numerous in the high mountain region of the south—that is, the Alps and Pyrenees. The owl is found in nearly every part of the continent.

Europe is singularly free from venomous reptiles. Lizards are common in the countries that border on the Mediterranean, but are perfectly harmless. The chameleon occurs in Spain.

Fish, of nearly every variety, abound in the seas and rivers of Europe, and many of them are extensively used as the food of man. The fisheries of the Mediterranean, Black, Baltic, and Caspian Seas, are all highly valuable. The tunny, which is the largest of edible fish, is found in the Mediterranean. The seas that surround the British Islands contain a vast abundance of such fish as the cod, herring, mackerel, turbot, and pilchard, besides the crab, lobster, prawn, and many others. The salmon abounds in the rivers of northern and western Europe, as it also does in the Volga and other streams of eastern Russia.

Of insects, the kinds that are annoying and hurtful to man are, happily, comparatively scarce in this portion of the globe. The most useful member of the insect tribe—the common honey-bee—is reared in most European countries. The silk-worm is numerously reared in the south of Europe—in Italy, Spain, Switzerland, and the south of France. The scorpion is found in the south of Europe. The insects which are familiarly known as occurring in our own country (and which are more or less common throughout the globe)—as flies, &c., do not require to be specially mentioned.

The POPULATION of Europe—amounting to a total of above 270,000,000—consists for the most part of what is known distinctively as the Caucasian (or white) variety of mankind. Nine-tenths of the whole belong to this stock of nations.

There are differences amongst them, the result of diversity of climate, and perhaps of other causes. The nations of southern Europe—the Spaniards, Portuguese, Italians, and Greeks—are distinguished by their darker skin and their generally slender frame from the people who are native to the middle and northerly portions of the continent. Their robust frames, fair complexions, their light eyes and hair, are among the distinguishing marks of the people of middle and northern Europe.

Three leading divisions of the Caucasian family are marked—the Celtic, the Germanic (or Teutonic), and the Slavonian. The last-mentioned is spread over nearly all eastern Europe; the Germanic over its middle and north-western, as well as many of its western, countries; the Celtic is now almost limited (as a pure race) to France, Ireland, and the Highlands of Scotland. The nations of southern Europe are generally of mixed blood, in which Celtic has a large admixture. The Turks, in the south-east, are of Asiatic origin.

EXAMINATION QUESTIONS.

1. What is the distinguishing characteristic of the climate of Europe, on the whole?
2. Comparing the kinds of climate experienced in the southern, middle, and northerly regions of Europe, what is the character of each?
3. Why are the countries that are situated within the tropics hotter than other parts of the world?
4. Within what zone does the greater part of Europe fall?
5. Why do countries receive less direct heat from the sun in proportion as they are further removed from the equator?
6. What is meant by the sun's *declination*?
7. In what way does the sun's declination affect the respective length of the days and nights in either hemisphere?
8. Is the difference between the length of the day and night at opposite seasons greatest in the north, or in the south, of Europe?
9. In what way do the long days and short nights of one portion of the year, and the short days and long nights of the opposite season, affect the climate of the countries of northern Europe?
10. In what portion of Europe is the transition between the different seasons most gradual, and in what portion is it most strongly marked?
11. What are the chief climatic differences that belong to the countries of southern Europe?
12. There is a marked difference between the climate of the countries of western Europe, and those situated towards its eastern limits: in what does it consist, and how is it accounted for?
13. Explain the kind of influence which the sea generally exerts upon climate.
14. Moscow and Edinburgh are two cities situated at nearly the same distance from the equator; but they possess very different climates. How do you account for this?

15. In what way do mountain-chains and plateaus affect climate?
16. Switzerland and Italy—which lie respectively to the north and south of the Alps—have very different climates. How do you account for this?
17. In which parts of Europe is rain most abundant?
18. In which parts of Europe does rain occur (on the average) upon the greatest number of days in the year?
19. What three great classes of objects do the natural productions of the earth include?
20. By what characteristic is Europe distinguished in regard to its natural productions?
21. In what countries of Europe do the following metals occur—gold, silver, platinum, and quicksilver?
22. In what countries of Europe does iron occur?
23. In what European countries do copper and lead occur?
24. Where are zinc and tin found?
25. In what countries of Europe is coal most abundant? In what other countries is it found?
26. In what European countries does salt occur as a native produce?
27. Among the various food-plants, name some of the grains that are most abundantly cultivated in Europe.
28. Of fruits, name those that characterise its middle latitudes, and some of those that belong more especially to its southern regions.
29. There is a characteristic difference between the trees that belong to the countries situated on the Mediterranean shores, and those that are native to middle and northern Europe. In what does this difference consist?
30. What wild animals, formerly native to the British Islands, have been exterminated thence?
31. In what countries of Europe is the wolf still found in a native state?
32. Name the domestic animals that are most numerously reared in Europe.
33. In what part of Europe is the reindeer found?
34. To what part of Europe are the chamois and the ibex native?
35. Name some of the birds that are characteristic of Europe, and say to what regions they more particularly belong.
36. The fish that are found in the seas and rivers of Europe are of great commercial value. Name some of those that are found in the British Seas.
37. Of insects, there are two which are extensively reared in Europe, and which serve valuable purposes to man. What are they?
38. To what (in round numbers) does the population of Europe amount?
39. To what race of mankind do the bulk of the inhabitants of Europe belong?
40. What distinction (in external appearance) is there between the nations of southern Europe, and those of its middle and northerly regions?
41. Name the three great divisions of the European family of nations.

COUNTRIES OF EUROPE.

GREAT BRITAIN AND IRELAND.

GREAT BRITAIN and IRELAND are two large islands situated in the Atlantic Ocean, off the western side of the European continent. They are the two largest members of a group called THE BRITISH ISLANDS. The island of Great Britain includes England, Wales, and Scotland. Ireland lies to the west of Great Britain, and is divided from it by the Irish Sea. The smaller islands of the group comprehend the Isle of

Wight, the Isle of Anglesey, the Isle of Man, the islands Bute and Arran, the Hebrides, the Orkney Islands, and the Shetland Islands, with many others of less size. The Shetland Islands are the most northerly portion of the British archipelago.

England and Wales, which together form the southward division of Great Britain, constitute the most important portion of the British Islands, and will be described first.

ENGLAND AND WALES.

SITUATION, BOUNDARIES, AND EXTENT.—England makes nearer approach to the mainland of Europe than any other portion of the British Islands. The strait of Dover, which divides the shores of England from those of France, is only twenty-one miles across.

England is bounded on the north by Scotland; on the east by the German Ocean (or North Sea); on the south by the English Channel; on the west by the Irish Sea, the principality of Wales, and the Atlantic Ocean. Wales is enclosed on three sides—the north, west, and south—by the waters of the Irish Sea, St George's Channel, and the Bristol Channel: to the eastward, it adjoins England. Although in times long past Wales was a distinct country from England, yet the two are now so inseparably connected, and have been so long under the same government, that it is most convenient to describe the two under one head, and to speak of them as a single country.

England embraces an area* (in round numbers) of about 50,000 square English miles, and Wales 7,500. Taken together, England and Wales are but a small country, equal in magnitude to scarcely more than a nine-hundredth part of the lands upon the earth's surface.

CAVES.—The principal capes, or headlands, upon the coasts of England and Wales are the following:—On the east, Flamborough Head, Spurn Head, Lowestoft Ness, the Naze, and the North Foreland.

On the south, the South Foreland, Dungeness, Beachy Head, Selsey Bill, St Catherine's Point, St Alban's Head, Portland Bill, Berry Head, Bolt Head, and the Lizard.

* The superficial extent of any place—that is, the measure of its surface—is called its area, from the Latin *area*, a field or open space.

On the west, the Land's End, Hartland Point, Worms Head, St David's Head, Great Orme's Head, Point of Aire, Formby Point, and St Bees Head.

Lowestoft Ness, which is on the coast of Suffolk, is the most easterly point of England. The Lizard is the most southerly, and the Land's End the most westerly point: both of them are in the county of Cornwall.

COASTS.—The following inlets occur on the east coast of England:—the estuary* of the Humber, the Wash, and the mouth of the Thames. On the south coast, Portsmouth Harbour, Southampton Water, Weymouth Bay, Tor Bay, Plymouth Sound, Falmouth Harbour, and Mount's Bay. On the west, the Solway Frith, Morecambe Bay, Cardigan Bay, and the Bristol Channel, which last includes Caermarthen Bay, Swansea Bay, and Barnstaple Bay.

The west coasts of England are more irregular in outline, and exhibit a greater number of capes and inlets, than either the southern or the eastern coasts. They are also, for the most part, more elevated, and they enclose a greater number of good natural harbours.

MOUNTAINS AND PLAINS.—England exhibits generally a gently-sloping or undulating surface, which, however, rises in some places into lofty hills. Wales is chiefly mountainous.

The high grounds of England and Wales lie principally upon the western side of the island, forming a succession of elevated regions which stretch nearly from the borders of Scotland to the Land's End, and are seldom far removed from the western coasts. These high grounds include (taking them in order, from north to south), the Cheviot Hills, the Pennine Chain, the Cumbrian Mountains, the Welsh Mountains, and the high grounds of Devon and Cornwall.

1. The Cheviot Hills are on the borders of England and Scotland. The high grounds forming the Pennine Chain extend from the Cheviot Hills to the district called the Peak (in the county of Derby), nearly along the dividing line between the six northern counties.

2. The Cumbrian Mountains form a group in the counties of Cumberland, Westmoreland, and northern Lancashire, near the coast of the Irish Sea. They contain the highest elevation

* An estuary is a narrow arm of the sea, such as is often formed at the mouth of a river. In Scotland it is called a frith. The word estuary is from the Latin *æstuarium*. Frith is from the Latin *fretum*.

in England—Scaw Fell, situated in the centre of the group, and reaching 3166 feet above the level of the sea. The mountains called Skiddaw and Helvellyn, in the same group, are nearly as high.

3. The Welsh Mountains spread over the greater part of the surface of Wales, and reach in their highest point a greater elevation than any of the English mountains. Snowdon, in the county of Caernarvon, 3571 feet above the sea, is the highest. Cader Idris, Plinlimmon, the Beacons of Brecknock, and many others, are lofty and well-known points.

4. The high grounds of Devonshire and Cornwall are less elevated, but still impart a varied and often rugged surface to the south-west corner of the island. Dartmoor, in Devonshire, reaches 1792 feet above the sea. Brown Willy, the highest hill in Cornwall, is 1368 feet.

To the eastward of the above tracts, the elevations are much less conspicuous: few points reach more than a thousand feet above the sea-level, and most of them are considerably below that altitude. The names of the most important among these lower heights, with the counties in which they are situated, are as follows :—

North York Moors...	Yorkshire.	Cotswold Hills.....	Gloucester.
Wolds.....	{ Yorkshire and Lincolnshire.	Mendip Hills.....	Somerset.
Chiltern Hills.....		Quantock Hills	do.
Clee Hills	{ Buckingham and Oxford.	Blackdown Hills.....	do.
The Wrekin		Exmoor.....	{ Somerset and Devon.
Malvern Hills.....	{ Worcester and Hereford.	Salisbury Plain	Wiltshire.
Clent Hills.....		North Downs.....	Kent and Surrey.
		South Downs.....	{ Sussex and Hampshire.

The most extensive plains and valleys in England are the following:—the York Plain, the Cheshire Plain, the Central Plain, the district of the Fens, the Eastern Plain, the Valley of the Severn, and the Valley of the Thames. The district of the Fens, which lies round the shores of the Wash, includes parts of the counties of Lincoln, Northampton, Huntingdon, Cambridge, Norfolk, and Suffolk, and forms the lowest and most perfectly level portion of the island. More than half of Cambridgeshire, and large portions of Huntingdonshire and Lincolnshire, are within the Fens. The whole tract has been converted by drainage into a highly-productive

RIVERS.—The principal rivers of England and Wales are:—*On the East, flowing into the German Ocean—*

Tyne.	Witham.	Yare.	Blackwater.
Wear.	Welland.	Orwell.	Thames.
Tees.	Nen.	Stour (Essex).	Stour (Kent).
Humber { Ouse, Trent.	Great Ouse.	Colne.	

The Humber, which is really rather an arm of the sea than a river, is formed by the junction of the Ouse (of Yorkshire) and the Trent. The Ouse receives the Swale, Yore, Wharfe, Nidd, Aire (with its tributary, the Calder), Don, and Derwent. The Trent is joined by another river Derwent, and also by the Dove and the Soar. The Thames is joined by the streams of the Cherwell, Thame, Kennet, Wey, Mole, and Medway.

The river Thames is, with two exceptions,* the longest river in the British Islands, and it ranks first in order of importance, since it has London, the metropolis of the British Empire, upon its banks. The Thames rises near the eastern foot of the Cotswold Hills, and has a course of 215 miles to the sea.

On the South, flowing into the English Channel—

Rother.	Itchen.	Froom.	Teign.
Ouse (Sussex).	Anton, or Test.	Axe.	Dart.
Adur.	Avon (Salisbury).	Otter.	Tamar.
Arun.	Stour (Dorset).	Exe.	Fal.

The Salisbury Avon, the Exe, and the Tamar, are the three longest of the above.

*On the West,**Flowing into the Irish Sea—*

Eden.	Ribble.
Derwent.	Mersey.
Kent.	Dee.
Lune.	Conway.
Wyre.	Teify.

Flowing into the Bristol Channel—

Towy.	Severn.
Tawe.	Avon (Bristol).
Neath.	Parret.
Usk.	Tawe.
Wye.	Torridge.

The Severn is the longest river of England and Wales. It rises upon Plinlimmon (one of the Welsh Mountains), and has a course of 240 miles to the sea. The Severn is joined by the Virnwy, the Tern, the Stour (of Stafford and Worcestershires), the Tema, and the Upper Avon—or Avon of Warwick and Stratford.†

LAKES.—There are few lakes in England, and they are nearly all situated within the region of the Cumbrian Mountains. The largest are Windermere, Ulleswater, Conistone, Derwent Water, Bassenthwaite, Crummock, and Wast Water. In Wales, are Lake Bala, the Lakes of Llanberis, Llyn Conway, and Brecknock-mere.

* The Severn and the Shannon.

† Three rivers named Avon have been mentioned above, and there are several other streams, in various parts of Britain, that bear the same name. Avon (or a/on) was the Celtic term for a stream, or running water. Ouse, which is also a name attached to several English rivers, is from the French *cours* (waters), and is a record of the Norman rulers of our island.

CLIMATE AND NATURAL PRODUCTIONS.—The climate of England is temperate and healthy. The average temperature of the year is rather higher than that of the adjacent shores of the continent, while the summers are not so hot, nor the winters so severe, as those experienced on the mainland in similar latitudes. The general moisture of the atmosphere, and the frequent occurrence of rain, as well as the above-mentioned characteristics, are explained by the insular position of Britain. The western side of the island has a rather higher temperature than the neighbourhood of the eastern coasts, and has also a greater fall of rain. The coasts of Cornwall and Devon, and the shores of South Wales, are especially distinguished by the mildness of their winter.

The mineral produce of England and Wales is distinguished by its extraordinary abundance in what are most necessary to civilised man—coal and iron, together with copper, lead, zinc, tin, and other ores. The coal-fields of England occur chiefly in the northern and midland counties, and yield an inexhaustible supply of that fuel—necessary alike for the purposes of manufacturing industry and of household consumption. South Wales includes a rich coal-field, of large extent, and North Wales contains some like tracts, of smaller area. Iron-ore occurs abundantly within the limits of nearly all the coal-districts, and is most extensively worked in South Wales, together with the counties of Stafford, Shropshire, Yorkshire, Derbyshire, Durham, and Northumberland. Lead is principally worked in Derbyshire, Northumberland, Cumberland, North and South Wales, and Devonshire. Copper and tin belong chiefly (the latter entirely) to the counties of Cornwall and Devon. Cheshire furnishes an abundant supply of salt, from the brine-springs and mines in the valley of the river Weaver, which joins the Mersey. Good marbles and building-stones are derived from the northern and north-midland districts of the country, as well as from its south-western peninsula. The Isle of Portland, in the county of Dorset, furnishes building-stone of excellent quality. The easterly and south-easterly divisions of England are deficient in this material; but the valuable clays in which they abound supply the material—brick—of which the metropolis and other cities in those parts of the island are chiefly constructed. Slate is extensively quarried in Wales, and in the mountain-region of Cumberland and Westmoreland.

The large extent to which the land has been brought under

culture has greatly diminished the size of the forests with which considerable portions of England were formerly covered, while many of the wild animals which its woods once sheltered have become altogether banished from within its limits.* The wild grasses, flowers, and shrubs, with the numerous smaller members of the animal kingdom, though interesting to the naturalist, are of less real importance than the grains, fruits, and vegetables—the domestic cattle and various farm-yard stock, which engage the attention of the agricultural portion of the English population. Few, even of those which thrive most upon its soil, were originally native to England, and several have been introduced within a comparatively modern date.† Among trees, the oak, elm, birch, poplar, alder, aspen, yew, mountain-ash, and Scotch fir, are probably indigenous to the soil: as also are the apple, the hazel-nut, willow, black and white thorn, blackberry, and common dog-rose. The trees, shrubs, and roots that are most common in England are, for the most part, the same that belong to the similar latitudes of the European continent.

POPULATION AND INDUSTRIAL PURSUITS.—England and Wales contained, in 1851, nearly eighteen millions of inhabitants. In the proportion of inhabitants to extent of surface, England is more populous than any other country of Europe, with the exception of Belgium.

Manufactures and trade constitute the characteristics of the national industry of Britain in the present day, and the proportion of the population of England that are engaged in them is rapidly increasing. It is only within a recent period, however, that such has been the case. Before the close of the last century, England was essentially an agricultural country. The rapid extension of machinery, and the amazing growth of our great branches of manufacturing industry, have effected a striking change in the general character of the national industry. England ranks first among the nations of the world,

* See *ante*, p. 28.

† The vegetables which compose our common salads (as lettuces, radishes, &c.) were not grown in England until the reign of Henry VIII. The potatoe—a native of the New World—was first introduced into England in the reign of Elizabeth. The peach, and other fruits of like kind, have been derived (by way of southern Europe) from the countries of western Asia. We owe some of our most common garden-flowers, as the ranunculus and the damask-rose, to the Crusaders and their companion-pilgrims. The various roses, the narcissus, iris, jonquil, mignonette, and many other well-known ornaments of our garden, have been derived from western Asia, or the coasts of the Mediterranean.

in regard both to the extent of manufacturing produce and the amount of its foreign trade. Its agricultural produce, though considerable, is unequal to the consumption of its population, and the deficiency is supplied by the importation of corn from other lands.

The most strictly agricultural districts of England are found chiefly in the eastern and southern portions of the island: the manufacturing districts belong to the northern, north-midland, and western countries. The farming pursued in the latter is devoted in great measure to the rearing of stock, which is also (from the hilly nature of its surface, unsuited to the plough) the case in Wales. Wheat, oats, barley, and rye, are the grains most largely grown: wheat most extensively in the south-eastern counties, barley in the eastern and midland counties, oats within the district of the Fens, and in the north. Hops are cultivated chiefly in Kent and Surrey (within the tract of country known as the Weald),* and in the counties of Worcester and Hereford. The potatoe is very largely grown in Lancashire, Cumberland, and Cheshire; the turnip chiefly in Norfolk. Rape is much cultivated in Lincolnshire and Cambridgeshire; hemp and flax in the counties of Lincoln and Suffolk. Garden vegetables are grown, on the most extensive scale, in the vicinity of the metropolis, and near the large towns in general. The counties of Hereford and Devon are distinguished for the extensive culture of the apple, from which cider is largely made.

Cotton, wool, and iron, are the three great staples of the manufacturing industry of Britain. The *first*, which is a vegetable material—the pod of the cotton-plant—is derived by import, chiefly from the United States of America. The *second*, which belongs in its native state to the animal kingdom, is furnished by the fleeces of the sheep reared upon our plains and downs, together with a large quantity imported from distant lands—principally from our colonies in Australia. The *third*, a mineral ore, is supplied in exhaustless abundance by the English soil.

The southern division of Lancashire, and the adjoining part of Cheshire, are the great seat of the cotton manufacture, which, though of comparatively recent origin, employs a much larger number of artisans than any other single branch of

* That is, *wood*, or *forest*, which is what the word (of Saxon origin) means. In former times, all this portion of Kent and Surrey, with the adjoining part formed a vast forest.

British industry. Manchester is the centre and capital of the cotton manufacture, and Liverpool is its port. The West Riding of Yorkshire is the chief seat of the woollen manufacture, and the towns of Leeds and Bradford are its principal centres of industry. The south part of Staffordshire, and the adjacent portions of Warwick, Worcester, and Shropshire, are the chief seat of the manufacture of iron and hardware goods, and the town of Birmingham is the manufacturing capital of this district. Sheffield, in Yorkshire, is the chief seat of one branch of the hardware trade—the making of cutlery.

Other manufactures are carried on extensively in England, but none upon a scale of such magnitude as the three above named. The silk and linen manufactures, the making of hosiery and lace, the leather manufacture, those of earthenware and glass, of watches and clocks, of paper, and a vast variety of others, are all of importance. The making of earthenware, on an extensive scale, is almost peculiar to a district in the north of Staffordshire, which is hence called “the Potteries.”

The foreign commerce of England extends to every part of the globe: her ships traverse every sea, and her flag is seen in the harbours of every land. The *importation* of raw materials, and the *export* of manufactured goods, are the distinguishing features of English commerce. Sugar, coffee, spices, and other productions of tropical regions, foreign to the English soil, are imported from the East and West Indies; tea from the ports of China; tobacco from the United States and elsewhere; timber from Canada and the countries lying round the Baltic Sea; wines and spirits from France, Spain, and Portugal; hides, skins, and tallow, from South America, the Cape of Good Hope, and Russia. The countries to which the largest quantities of British manufactures and other produce are exported, are the United States of America, the Australian Colonies of Britain, the East Indies, Germany, Prussia, Holland, Canada, and the other British colonies in North America, with Brazil, Turkey, France, the West Indies, Russia, Italy, China, Spain and Portugal, and the various states of South America.

Good roads traverse every part of England, and the numerous railways that have been constructed within the last thirty years supply the means of rapid communication between all the principal towns. Nearly 8000 miles of railway are open

for traffic in England and Wales. The midland counties of England are also traversed extensively by canals.

COUNTIES AND TOWNS.—England and Wales are divided into fifty-two counties : England contains forty of the number, and Wales twelve. The shapes of these divisions are very irregular, and the sizes very unequal, as the map shows us. Rutlandshire, the smallest of the English counties, is hardly more than one-fortieth part of the size of Yorkshire, which is the largest. Lincoln, Devon, and Norfolk, come next to Yorkshire in order of magnitude. Middlesex, Huntingdon, and Bedford, are, next to Rutland, the smallest in dimensions.

The English counties are divided, with reference to relative situation, into 6 northern, 6 western, 5 eastern, 9 southern, and 14 midland counties.

The name of the six northern counties are Northumberland, Durham, Yorkshire, Cumberland, Westmoreland, Lancashire. The first three border on the German Ocean : the other three are on the western side of the island, adjacent to the Irish Sea.

The six western counties are Cheshire, Shropshire, Herefordshire, Monmouthshire, Gloucestershire, and Somerset. The four first-mentioned of the number adjoin the Welsh border.

The five eastern counties are Lincoln, Cambridge, Norfolk, Suffolk, and Essex. All of them, except Cambridge, are washed by the waters of the German Ocean.

The nine southern counties are Kent, Surrey, Sussex, Berkshire, Hampshire, Wiltshire, Dorsetshire, Devon, and Cornwall. They stretch (with the exception of Surrey, Berkshire, and Wiltshire, which are inland) along the shore of the English Channel, from the North and South Forelands on the east, to the Lands End in the west.

The 14 midland counties are Stafford, Derby, Nottingham, Leicester, Warwick, Worcester, Oxford, Buckingham, Middlesex, Hertford, Bedford, Huntingdon, Northampton, and Rutland. The first six are sometimes distinguished as the *north-midland* district, and the remainder as the *south-midland*. Middlesex is termed the metropolitan county, since it contains London, the capital of the British Empire.

In each county, the town in which the assizes (or courts for the trial of offences against the law) are periodically held, is termed the county-town. This ranks as the capital of the

county, though it does not always coincide with the largest town which the county may contain.

1. **MIDDLESEX** is the most populous of the counties, owing to the larger portion of London being within its limits. It stretches along the north bank of the river Thames, by which it is divided from the neighbouring county of Surrey.

London, with its suburbs, stretches over a vast space, within which are included upwards of two and a quarter millions of inhabitants—probably a larger population than that of any other city on the globe. Besides its rank as the metropolis of the kingdom, London is a great manufacturing and commercial city, a centre of arts, literature, general refinement, and wealth. Westminster, which is now included within the westerly limits of the metropolis, was formerly separated from London by intervening fields, and still preserves the privileges of a distinct city. Southwark, the southwardly division of London, is to the south of the Thames, and within the county of Surrey. London contains the cathedral church of St Paul's, and constitutes a bishop's see.

The small towns of *Brentford*, *Uxbridge*, and *Staines*, are in this county.

2. **HERTFORDSHIRE** is an agricultural county, and has no towns of large size. *Hertford*, on the river Lea, is the county-town. Near it is *Ware*, also on the Lea. *St Albans*, *Hitchin*, *Watford*, *Bishop Stortford*, and *Barnet*, are small places in this county. St Albans was the scene of two of the battles fought during the Wars of the Roses (1455 and 1461). Barnet, which lies on the borders of Hertford and Middlesex, witnessed a more important event of like kind, belonging to the same disastrous period—the battle in which the famous Earl of Warwick was slain, A.D. 1471.

3. **BUCKINGHAMSHIRE** is entirely an agricultural county. Its county-town, *Buckingham*, lies on the Great Ouse, in the northern part of the county. The other towns are *Aylesbury*, *Great Marlow*, and *Wycombe*.

4. **OXFORDSHIRE**, also an agricultural county, has for its capital the cathedral city of *Oxford*, seated at the junction of the Cherwell and the Thames. Oxford is a celebrated seat of learning, one of the two ancient universities of England. Among the other towns are *Banbury*, *Witney*, *Henley-on-Thames*, and *Woodstock*. Chalgrove Field, the scene of a skirmish between the forces of Charles I. and the Parliament,

in which Hampden was mortally wounded (1643), is in this county.

5. NORTHAMPTONSHIRE is chiefly an agricultural county. Its county-town, *Northampton* (on the river Nen), has, however, an extensive manufacture of boots and shoes. *Peterborough*, also on the Nen, is a cathedral city, and has considerable trade. *Wellingborough*, *Kettering*, and *Daventry*, are smaller towns. Naseby, the scene of the decisive victory gained by Cromwell over the army of Charles I. (A.D. 1645), is in this county, twelve miles distant from Northampton, to the N.W. A battle was fought near the town of Northampton in 1460, during the Wars of the Roses.

6. BEDFORDSHIRE, a small agricultural county, has for its capital the town of *Bedford*, on the river Ouse. Among its other towns are *Luton*, *Dunstable*, *Leighton Buzzard*, and *Woburn*.

7. HUNTINGDONSHIRE is an agricultural county, and great part of it is within the district of the Fens. Its county-town, *Huntingdon*, on the river Ouse, was the birth-place of Oliver Cromwell. *St Ives* and *St Neots* are small towns in this county.

8. RUTLANDSHIRE, the smallest of the counties, is entirely agricultural. It contains the small towns of *Oakham* and *Uppingham*, the former of which is the county-town.

9. LEICESTERSHIRE has extensive manufactures, though a great portion of the county is agricultural. The county-town, *Leicester* (on the river Soar, which joins the Trent), is noted for its manufacture of woollen stockings, and is one of the most considerable of our midland towns. *Ashby-de-la-Zouch*, in the N.W. part of the county, has a small coal-field in its neighbourhood. The other towns are *Loughborough*, *Hinckley*, *Melton-Mowbray*, and *Market Harborough*. Bosworth, near which the battle that terminated the Wars of the Roses was fought, in 1483, is a few miles west of Leicester.

10. WARWICKSHIRE is a manufacturing county. The county-town, *Warwick*, is on the banks of the Upper Avon. Adjoining it is *Leamington*, famous for its mineral waters.

Birmingham, in the N.W. part of Warwickshire, close to the Staffordshire border, is a large and populous town, the great centre of the iron trade. *Coventry*, further to the east, has a small coal-field in its vicinity, and is noted for its manufacture of ribbons. *Rugby*, *Nuneaton*, and *Stratford-on-Avon* (the birth-place of Shakspeare), are in this county. The battle

of Edgehill (A.D. 1642) was fought on the rising ground of that name, within the southern extremity of Warwickshire.

11. WORCESTERSHIRE has extensive manufactures in its northerly division, but is chiefly an agricultural county. Its capital, *Worcester* (on the Severn), is a cathedral city, and is noted for its porcelain and glass-works, as well as for many events of historic fame—chief among them the victory of Cromwell over the adherents of Charles II., in 1651. *Kidderminster* (on the Stour) has extensive carpet factories. *Dudley*, further to the north, though belonging to this county, is locally within the iron and coal district of South Staffordshire, and is a populous seat of the hardware trade. *Bromsgrove*, *Stourbridge*, *Stourport*, and *Evesham*, are within this county. *Evesham* (within the fertile vale of that name, watered by the Avon) was the scene of a battle between Prince Edward and the barons under Simon Montfort, in 1265.

12. STAFFORDSHIRE is a manufacturing county. It includes two coal-fields—one (that of South Staffordshire), the seat of the iron and hardware manufacture; the other (in the northern part of the county), embracing the district of the Potteries. The county-town is *Stafford*, on the river Sow, an affluent of the Trent. But *Wolverhampton*, *West Bromwich*, *Walsall*, *Bilston*, and *Wednesbury*, within the coal and iron district of the south (and in the vicinity of Birmingham), are all of larger size. *Stoke-upon-Trent* (in the northern part of the county) is in the Pottery district. *Lichfield*, towards the eastern border of the county, is a cathedral city. *Leek*, *Burton-on-Trent*, and *Tamworth*, are towns of smaller size.

The site of the battle of Blore Heath (A.D. 1459) is within this county, about 11 miles to the N.W. of Stafford, and close to the Shropshire border.

13. DERBYSHIRE is partly a manufacturing county, but embraces the rugged and elevated district of the Peak, which forms its northerly division. It has numerous lead and iron mines, and includes part of an extensive coal-field, the larger portion of which is within the adjacent county of York. The chief town, *Derby* (on the river Derwent, which joins the Trent), is a great seat of the silk manufacture, and particularly of silk stockings. *Chesterfield*, *Belper*, *Wirksworth*, *Ashborne*, and *Matlock*, are among the other towns. *Matlock* is noted for its warm mineral waters, and for the romantic beauties of its scenery.

14. NOTTINGHAMSHIRE is part manufacturing, but is more

generally an agricultural district. The chief town, *Nottingham* (on the Trent), has extensive manufactures of cotton-stockings and lace. *Newark*, *Mansfield*, and *Worksop*, are smaller towns. A few miles from Newark, and near the south bank of the Trent, is the village of Stoke, the scene of a battle fought (A.D. 1487) between the army of Henry VII. and the followers of the impostor Simnel.

15. NORTHUMBERLAND, the most northerly of the English counties, contains the towns of Newcastle, North Shields, Berwick, Alnwick, Morpeth, and Hexham. The south-eastern portion of the county contains a rich coal-field, and has coal-mines, iron-works, and various manufactures. Its western and northern divisions are hilly and pastoral. *Newcastle*, on the river Tyne, is the chief seat of the coal-trade, and is also the county-town. *Hexham*, a few miles west of Newcastle, was the scene of a victory gained by the Yorkists over the Lancastrian forces, in 1464. *Berwick*, at the mouth of the river Tweed, adjoins the Scotch frontier, and is celebrated in the history of early border warfare. Halidon Hill, the scene of a victory gained by the English over the Scots, in 1333, is immediately to the north of Berwick. Northumberland includes the site of the battle of Flodden, so disastrous to the Scotch, fought (in 1513) near the village of Flodden, a few miles distant from the small town of Wooler, at the eastern foot of the Cheviot Hills. Homeldon, the scene of Harry Percy's victory over Douglas (in 1402), lies only a mile distant from Wooler.

16. DURHAM adjoins Northumberland, and resembles that county in its eastern part, which is a rich coal-field, with numerous iron and other works, and busy seaport towns. The cathedral city of *Durham*, the capital of the county, is on the river Wear. At the mouth of the same river is *Sunderland*. *Stockton* (on the Tees), *Hartlepool*, and *South Shields*, are also in this county. The battle of Neville's Cross, gained over the Scottish army in 1346, was fought in this county, a few miles distant from the city of Durham.

17. YORKSHIRE is divided into three *ridings*—the North, East, and West Ridings. The two former are agricultural and pastoral: the West Riding embraces part of an extensive coal-field, and is a populous district, the chief seat of the woollen and clothing manufactures. *York*, the capital of the county, and an archbishop's see, stands on the river Ouse, in

the centre of a fertile plain. A few miles west of York is the village of Long Marston, near which the army of Charles I. was defeated by Cromwell, in 1644. Further to the south-west, near the banks of the Wharfe, is Towton, the scene of the bloodiest engagement fought during the Wars of the Roses (1461). Stamford Bridge, a few miles east of York (on the river Derwent), is noteworthy for the victory gained there by Harold over his brother Tostig and a Norwegian army, a few days prior to the battle of Hastings.

The chief towns in the West Riding of Yorkshire are Leeds, Sheffield, Bradford, Huddersfield, Halifax, Wakefield, Barnsley, Dewsbury, Doncaster, and Ripon. *Leeds* (on the river Aire), *Bradford*, *Huddersfield*, and *Halifax*, are the great seats of the woollen and clothing manufactures. *Sheffield*, on the river Don, is the seat of the cutlery trade. *Ripon*, on the Yore, is a cathedral city. *Wakefield* (on the river Calder) was the scene of a victory gained by the Lancastrians over the followers of the White Rose, in 1460.

The East Riding contains the towns of Hull, Beverley, and Bridlington. *Hull* stands on the north bank of the Humber, at the entrance of the little river Hull, and is an important seaport.

The North Riding contains *Scarborough* and *Whitby*, both situated on the coast; with *Malton*, *Richmond*, and *North Allerton*, in the interior. The battle of the Standard, between the English and Scottish armies, in 1138, was fought near North Allerton.

18. CUMBERLAND is for the most part mountainous. Its northerly division includes a plain of some extent, along the Solway Frith and the lower course of the Eden. In the west, adjoining the Irish Sea, is a small but highly productive coal-field. The chief towns are Carlisle, Whitehaven, Workington, Maryport, Cockermouth, Penrith, and Keswick. *Carlisle*, the capital, is a cathedral city, on the river Eden. *Whitehaven*, on the coast, is the chief seat of the coal-trade. *Keswick* is in the heart of the lake district.

19. WESTMORELAND contains the towns of *Kendal* and *Appleby*, the latter of which is the county-town. But *Kendal* (on the river Kent, which flows into Morecambe Bay) is of larger size, and has woollen and other manufactures. The greater part of Westmoreland is mountainous and pastoral.

20. LANCASHIRE includes the great seats of the cotton manufacture. This branch of industry is pursued through all the

southern portion of the county, which embraces a valuable coal-field. *Manchester* (on the Irwell, a tributary of the Mersey), and *Liverpool* (at the mouth of the Mersey), are the largest towns in England, next to the metropolis: the former is the great centre of the cotton-trade, and the latter its port. Manchester is a cathedral city. *Preston* (on the Ribble), *Bolton*, *Oldham*, *Blackburn*, *Wigan*, *Rochdale*, *Ashton-under-Lyne*, *Staley Bridge*, *Warrington*, *Colne*, *Chorley*, and *Lancaster*, are all busy manufacturing towns. Lancaster, on the river Lune, ranks as the capital of the county.

A small detached portion of the county, known as Furness, lies to the north of Morecambe Bay. This belongs physically to the region of the Cumbrian mountains.

21. **CHESHIRE** is chiefly an agricultural county, but includes part of the cotton-manufacturing district. The cathedral city of *Chester*, on the river Dee, is its capital. Upon Rowton Heath, to the west of this city, the troops of Charles I. were defeated by the parliamentary forces, in 1645—a few months after the battle of Naseby. *Stockport*, *Macclesfield*, and *Birkenhead* (opposite to Liverpool), are considerable towns. *Nantwich*, *Middlewich*, and *Northwich*, in the valley of the river Weaver, are famous for their salt-works.

22. **SHROPSHIRE** is chiefly agricultural, but includes a small coal-field, and has some iron and other manufactures, at Coalbrook Dale and elsewhere. *Shrewsbury*, on the Severn, is the county-town. The battle between the army of Henry IV. and the insurgent forces under Hotspur was fought in its immediate vicinity, in 1403. The other towns are *Bridge-north*, *Wellington*, *Ludlow*, and *Oswestry*.

23. **HEREFORDSHIRE** is entirely agricultural, and is famous for its hop-grounds and its orchards. The city of *Hereford*, its capital, stands on the river Wye, and has an ancient cathedral. *Leominster*, *Ledbury*, and *Ross*, are small towns in this county. A few miles to the north-west of Leominster is Mortimer's Cross, one of the battle-fields of the Roses (A.D. 1461).

24. **MONMOUTHSHIRE** is a mining and manufacturing county. It includes a portion of the South Wales coal-field, and has numerous iron-works. The chief town, *Monmouth*, is on the Wye, at the junction of the small river Munnow. The other towns are *Newport* (a considerable seaport at the mouth of the Usk), *Abergavenny*, *Pontypool*, and *Chepstow*.

25. **GLOUCESTERSHIRE** includes the long chain of the Cots-

wold Hills, and is in great part agricultural. But it possesses two small coal-fields—one of them in the Forest of Dean, to the west of the Severn, the other near the Avon, on the south border of the county. The making of woollen cloth is pursued extensively at Stroud and other places in the neighbourhood of the Cotswolds. *Gloucester*, the capital, is on the banks of the river Severn, and is a cathedral city.* *Cheltenham*, *Stroud*, *Cirencester*, and *Tewkesbury*, are in this county. Cheltenham is famed for its mineral waters. Tewkesbury, on the Severn, is historically noteworthy on account of the victory gained there by Edward IV. over the army of Queen Margaret, in 1471, three weeks after the battle of Barnet.

Bristol, on the river Avon, is partly in Gloucestershire and partly in Somersetshire, but has the privileges of a county in itself. Bristol is an important and flourishing port.

26. SOMERSETSHIRE is almost wholly agricultural. Its capital, the city of *Bath*, stands on the Avon, and is famous for its warm mineral springs. *Wells* is an ancient city lying at the foot of the Mendip Hills.† *Taunton*, *Frome*, *Bridgewater*, and *Yeovil*, are in this county. Between Bridgewater and Taunton is Sedgemoor, the scene of Monmouth's defeat by the troops of James II., in 1685. Athelney, the temporary retreat of Alfred the Great, was in former ages a marshy tract of ground, lying near the junction of the rivers Tone and Parret, by which it was insulated.

27. LINCOLNSHIRE is an agricultural county. Its capital, *Lincoln*, is an ancient cathedral city on the river Witham. *Boston*, also on the Witham, a few miles above its mouth, and *Grimsby*, on the south bank of the Humber, are flourishing ports. *Gainsborough* (on the Trent), *Stamford* (on the Welland), and *Louth*, are inland towns.

28. CAMBRIDGESHIRE is an agricultural county. Its northern half is called the Isle of Ely, from its having in former times been insulated by marshes, and is within the level region of the Fens. The county-town, *Cambridge* (on the river Cam, or Grant, which joins the Ouse), is the seat of one of the two ancient universities of England. *Wisbeach*, *Ely*, and *Newmarket*, are in this county. Ely, on the river Ouse, is a cathedral city.

29. NORFOLK is the only one of the eastern counties that possesses any considerable manufactures; but by far the

* The cities of Gloucester and Bristol form, unitedly, one diocese.

† The cities of Bath and Wells form together one diocese, or episcopal see.

larger portion of the county is agricultural. The ancient cathedral city of *Norwich*, its capital, was an early seat of the woollen manufacture, which it still retains. *Norwich* stands on the river *Wensum*, immediately above its junction with the *Yare*. *Yarmouth*, at the mouth of the *Yare*, is a flourishing seaport. *Lynn* (or *King's Lynn*), which also possesses considerable trade, is at the mouth of the *Great Ouse*.

30. **SUFFOLK** is entirely an agricultural county. Its chief town, *Ipswich*, stands on the river *Orwell*, a few miles above its mouth. *Bury St Edmunds*, *Lowestoft*, and *Sudbury*, are the other principal towns. *Lowestoft* is a seaport, situated at the most easterly extremity of Great Britain.

31. **ESSEX** is also chiefly agricultural. Its county-town is *Chelmsford*, on the river *Chelmer*. But *Colchester*, on the river *Colne*, is of larger size. *Harwich*, a seaport of more importance in a former period than at the present time, lies at the mouth of the river *Stour*. *Saffron-Walden*, *Braintree*, and *Maldon*, are small inland towns.

32. **KENT** is chiefly an agricultural county, but it contains numerous seaports, some of which, from their proximity to the coast of France, were early of historical importance. The county-town is *Maidstone*, on the river *Medway*. But *Chatham*, *Woolwich*, and *Dover*, are of larger size. *Chatham*, which lies near the mouth of the *Medway*, is an important naval arsenal. It adjoins *Rochester*, which is an ancient cathedral city. *Woolwich* is on the south bank of the *Thames*, below *London*. *Dover* is at the south-east corner of the island, immediately opposite to the coast of France. A few miles west of it is *Folkestone*, also a seaport of ancient date.

Canterbury, on the river *Stour*, is an ancient cathedral city—the ecclesiastical metropolis of England*—and surpasses any other place in Kent in historic dignity. It was here that the Saxon king *Ethelbert*, A.D. 597, embraced Christianity, on its re-introduction into Britain by the agency of *Augustine*.

Along the shores of Kent (beginning at the eastern suburbs of *London*), there occur in succession the following places:—*Greenwich*, *Woolwich*, *Gravesend*, *Rochester*, and *Chatham*; *Sheerness* (on the Isle of *Sheppy*), *Whitstable*, *Margate*, *Rams-gate*, *Sandwich*, *Deal*, *Dover*, *Folkestone*, and *Hythe*. *Margate* and *Ramsgate* are situated on the Isle of *Thanet*, which is now

* *Canterbury* and *York* are each the seat of an archbishopric. But *Canterbury* ranks first in point of dignity. The archbishop of *York* is a primate of *England*: the archbishop of *Canterbury* is primate of *all England*.

only divided from the mainland by a shallow creek. The sea immediately in front of Deal is called the Downs, and is a much-frequented roadstead.*

Some of the ports on the Kentish and Sussex coasts had peculiar privileges granted them in the later Saxon and early Norman times, from the importance of their position with reference to the opposite shores of the continent. The Cinque Ports, as they were called—originally five in number—were Sandwich, Deal, Dover, Hythe, and Romney, all in Kent. Three others, Rye, Winchelsea, and Hastings, in the adjoining county of Sussex, were afterwards added.† Dover, Deal, and Hastings are now the most considerable of the Cinque Ports, the harbours of the others having become, in the lapse of time, choked up by the sand.

33. SURREY includes that portion of the metropolis situated to the south of the Thames, but by far the greater part of the county is agricultural. *Guildford*, the county town, is on the river Wey, an affluent of the Thames: *Croydon*, a few miles south of London, is of larger size. *Richmond* and *Kingston*, both on the Thames, are in this county. Kingston was important in Saxon times, and seven of our Saxon kings were crowned there. Runnymede, where the Great Charter was signed by King John, at the instance of his armed barons (A.D. 1215), is within the north-western border of Surrey, immediately adjoining the south bank of the Thames, and near the small town of Egham.

34. SUSSEX, an agricultural county, includes an extensive line of coast lying along the English Channel. From Beachy Head westward, this coast is backed by the range of chalk hills called the South Downs. *Lewes*, on a small river called the Ouse, is the county town, and gave its name to a battle fought in the vicinity between Prince Edward (afterwards Edward I.) and the rebellious barons, during the reign of Henry III. (A.D. 1264). *Brighton*, on the coast, is a large and populous town, the resort of vast numbers of visitors from the metropolis. *Hastings*, also on the coast, is further to the eastward. A few miles west of Hastings (near Bulverhithe, on the shore of Pevensey Bay,) is the place where William the Conqueror landed, in 1066; the small town of *Battle*, to the

* A part of the open sea in which ships are accustomed to ride at anchor is called a road, or roadstead.

† These ports were bound by charter to provide a certain number of ships for the defence of the coast.

north-west of Hastings, marks the scene of the engagement which, a few days afterwards, transferred the dominion of England from Saxon to Norman hands. *Shoreham* and *Worthing* are on the coast, to the west of Brighton. *Chichester*, still further west, is a cathedral city.

35. **BERKSHIRE** is an agricultural county. *Reading*, its capital, stands at the junction of the river Kennet with the Thames. The other towns are *Windsor* (the frequent residence of our sovereign, on the south bank of the Thames), *Abingdon*, *Maidenhead*, *Newbury*, and *Wantage*. Two engagements between the armies of Charles I. and the Parliament occurred near Newbury (in 1643 and the following year). *Wantage* is distinguished as the birthplace of Alfred the Great.

36. **HAMPSHIRE** is an agricultural county. It possesses two important seaports, *Portsmouth* and *Southampton*; but *Winchester*, an ancient cathedral city, in the fertile valley of the Itchen, is the capital. Winchester was the chief city of the West Saxon kings, and continued to be regarded, in early Norman times, as the capital of the kingdom. Portsmouth is one of the three great naval arsenals of England.* *Andover*, *Lymington*, and *Basingstoke*, are small towns.

The Isle of Wight lies to the south of Hampshire, and forms a portion of that county. It contains the small towns of *Newport*, *Ryde*, and *Cowes*. Near Newport is Carisbrooke Castle, at one time the prison of King Charles I. The eastern portion of the channel which divides the Isle of Wight from the mainland is called Spithead: the western portion is the Solent.

37. **WILTSHIRE** is chiefly agricultural, but the manufacture of woollen cloth is carried on at Bradford, Trowbridge, and other places in its westerly division. *Salisbury*, the capital of the county, and a cathedral city, is on the Avon. The manor-house of Clarendon, where the well-known statutes called "The Constitutions of Clarendon" were drawn up in the reign of Henry II., is a few miles east of Salisbury. Stonehenge, a Druidical remain—among the most ancient monuments of our island—is upon the high chalk tract of Salisbury Plain. *Devizes*, *Warminster*, and *Marlborough*, are among the other towns in this county. Roundway Down, near Devizes, was the scene of a skirmish between the Royalist and Parliamentary forces, in 1643.

38. **DORSETSHIRE** is an agricultural county, and has several seaports, *Portsmouth*, *Plymouth*, and *Chatham*.

ral small seaports on the coast of the Channel. *Dorchester*, the county town, is on the river Stour. *Weymouth*, *Poole*, and *Bridport*, are among the other towns. The peninsular tracts known as the Isle of Purbeck and the Isle of Portland are both within this county.

39. DEVONSHIRE, which is chiefly an agricultural county, includes the high tract of Dartmoor, and (in the north) part of an elevated region called Exmoor, on the borders of Somerset. It has numerous seaports, some on the shore of the English Channel, and others on the side of the Bristol Channel. *Exeter*, the capital, is a cathedral city, on the river Exe. *Plymouth* and *Devonport* are adjacent towns, situated on the fine estuary of Plymouth Sound, which is one of the chief stations for the British Navy. *Barnstaple* (at the mouth of the river Tawe, which flows into Barnstaple Bay), *Bideford*, *Tiverton*, *Tavistock*, *Dartmouth*, *Teignmouth*, and *Torquay*, are in this county.

40. CORNWALL is chiefly a mining county. Its tin mines have been worked from a very early age—many centuries before the Christian era. It has also numerous copper mines. *Bodmin* is the county town, but *Truro* ranks as the capital of the mining district. *Penzance*, *Falmouth*, *St Austell*, and *Launceston*, are among the other towns. Stratton, near the northern extremity of the county, was the scene of a victory gained by the Royalists over the Parliamentary forces, in 1643.

The Scilly Islands lie off the coast of Cornwall, at the entrance of the English Channel.

WALES.—Six of the counties are in North Wales, and six in South Wales. The six counties of North Wales are Anglesea, Caernarvon, Denbigh, Flint, Merioneth, and Montgomery.

The six counties of South Wales are Cardigan, Radnor, Brecknock, Glamorgan, Caermarthen, and Pembroke.

The counties of Flint, Denbigh, and Anglesea, in North Wales, with Glamorgan and Caermarthen, in South Wales, possess coal and iron mines, and Glamorgan has considerable trade. But the greater part of Wales is pastoral.

The chief towns in each of the Welsh counties are named below, the county town being distinguished by *italics* :—

COUNTIES.	TOWNS.
ANGLESEA	Holyhead, <i>Beaumaris</i> .
CAERNARVONSHIRE.....	<i>Caernarvon</i> , Bangor, Conway.
DENBIGHSHIRE.....	<i>Denbigh</i> , Wrexham, Ruthin.
FLINTSHIRE.....	Holywell, <i>Mold</i> , Flint, St Asaph.
MERIONETHSHIRE.....	<i>Dolgelly</i> , Bala.
MONTGOMERYSHIRE.....	Newtown, Welshpool, <i>Montgomery</i> .
CARDIGANSHIRE.....	Aberystwith, <i>Cardigan</i> .
RADNORSHIRE.....	<i>New Radnor</i> , Presteign, Knighton.
BRECKNOCKSHIRE.....	<i>Brecon</i> , Hay, Builth.
GLAMORGANSHIRE.....	Merthyr-Tydvil, Swansea, <i>Cardiff</i> , Neath, Llandaff.
CAERMARTHENSHIRE.....	<i>Caermarthen</i> , Llanelli, Llandeilo.
PEMBROKESHIRE	<i>Pembroke</i> , Haverfordwest, Tenby, Milford, St David's.

Merthyr-Tydvil, which is within the South Wales coal-field, and which forms the centre of coal and iron works upon a scale of great magnitude, is the largest town in Wales. *Swansea* and *Cardiff* are next in size, and are the chief ports of the coal and iron district. But the towns in Wales are in general of small size. *Milford*, in Pembrokeshire, stands on the shore of Milford Haven, a magnificent natural harbour, formed by a deep inlet of the sea. *Holyhead*, on a small islet (Holy Island) which nearly adjoins the coast of Anglesea, is an important packet station. The channel which separates the Isle of Anglesea from the mainland is called the Menai Strait.

The Isle of Man forms a dependency of the English crown, but is not included within any of the counties. Its largest town is *Douglas*, but *Castletown* ranks as the capital.

QUESTIONS ON ENGLAND AND WALES.

1. Name the islands which constitute the British Archipelago.
 2. How is England bounded? Point to its limits on the map.
 3. Name the principal capes upon the east coast of England, and point them out on the map.
 4. Name the capes on the south coast.
 5. Name the capes on the west coast.
 6. Which are the extreme eastern, southern, and western points of England?
 7. Name, in successive order, the principal gulfs and other inlets on the coasts of England.
 8. What tracts of high ground occur in succession upon the western side of England and Wales, proceeding from north to south?
- Highest mountain in England, with its height in feet.

10. Which is highest among the mountains of Wales, and what is its elevation?
11. In what counties of England are the following:—Dartmoor, the Chiltern Hills, the Wrekin, the Mendip Hills, the South Downs, and the Wolds?
12. In what counties are the Cleve Hills, the Malvern Hills, the Cotswold Hills, the Blackdown Hills, Exmoor, and Salisbury Plain?
13. In what part of England is the district of the Fens? What counties fall in part within its limits?
14. Enumerate the principal rivers on the east side of England, proceeding from north to south. Into what sea do they fall?
15. Name the rivers that belong to the south coast.
16. Name the rivers that belong to the west coast, beginning in the north. Which of them fall into the Irish Sea? Which into the Bristol Channel?
17. Which are the two longest among the rivers of England and Wales? Into what seas do they flow?
18. Name the principal English lakes, and point on the map to the district in which they occur.
19. What parts of the English and Welsh coasts are distinguished by the superior mildness of their winter climate?
20. What minerals occur in England and Wales?
21. In which of the English counties is iron most largely worked?
22. From what county is salt most abundantly derived?
23. Where is slate chiefly quarried?
24. Name some of the trees that are native to the English soil.
25. In which parts of England is the industry of the people chiefly agricultural?
26. What grains are most extensively grown in England, and in what localities?
27. What three articles form the great staples of manufacturing industry in Britain? Whence is each principally derived?
28. What circumstance characterises the foreign trade of Britain, as to the general nature of its imports and exports?
29. From what countries are the following imports chiefly derived:—tea, coffee, sugar, timber, wine and spirits, tobacco, and hides?
30. To what countries are the largest quantities of British manufactures exported?
31. How many counties are there in England? Which is largest of the number? Which the smallest?
32. Name the six northern counties, pointing them out upon the map.
33. Name the six western counties.
34. Name the five eastern counties.
35. Name the nine southern counties.
36. Name the fourteen midland counties.
37. What three districts are respectively the great seats of the cotton, woollen, and iron manufactures; and what town is the chief industrial centre in each?
38. Name the metropolitan county. What towns, besides London, does it contain?
39. In what counties are the following towns:—St Alban's, Aylesbury, Banbury, Peterborough, Dunstable, and Loughborough?
40. In what counties are Birmingham, Kidderminster, Dudley, Stourbridge, Lichfield, Chesterfield, and Newark?
41. Of what branch of manufacturing industry is Birmingham the centre, and what adjacent towns are within the same manufacturing district?
42. In what county is Stoke-upon-Trent, and of what branch of industry is it the seat?
43. Of what manufactures are the towns of Nottingham, Derby, and Leicester the respective seats?
44. Upon what river is each of the following towns situated:—Derby, Leicester, Warwick, Peterborough, Bedford, and Nottingham?
45. Name the chief towns in the counties of Northumberland and Durham.

46. What are the chief towns within the West Riding of Yorkshire, and by what branches of industry are they distinguished?
47. Name the chief towns of Lancashire, distinguishing the county town.
48. Upon what rivers are the following towns:—Newcastle, Carlisle, Lancaster, Preston, Manchester, Shrewsbury, and Chester?
49. Name the county town of each of the six western counties, with the river on which it stands.
50. Name the county town of each of the five eastern counties, with the rivers on which they stand.
51. Name the nine southern counties, with the chief town of each.
52. In what counties are the following towns:—Oswestry, Abergavenny, Taunton, Wells, Stroud, Boston, Lynn, Yarmouth, Ely, Ipswich, and Colchester?
53. On what river does Norwich stand, and of what branch of manufacturing industry is it the seat?
54. In what counties are Maidstone, Guildford, Windsor, Lewes, Portsmouth, Newbury, Weymouth, and Salisbury?
55. Name the towns that are known as the Cinque Ports. In what counties are they situated?
56. On what rivers are Maidstone, Winchester, Reading, Salisbury, Dorchester, and Exeter?
57. By what branch of industry is Cornwall distinguished, and what towns does it contain?
58. In what counties of England are the sites of the following battles:—Hastings, Blenheim, Towton, Bosworth, and Stoke?
59. In what counties are the following:—Flodden, Edge Hill, Chalgrove, Marston Moor, Naseby, and Sedgemoor?
60. Name the six counties of North Wales, with the chief town of each.
61. Name the counties of South Wales, with the chief town of each.*

SCOTLAND.

SITUATION, BOUNDARIES, AND EXTENT.—Scotland is the northerly portion of Great Britain. It is divided from England by the Cheviot Hills, the Solway Frith, and the lower course of the river Tweed.

Scotland is bounded on the north and west by the Atlantic Ocean; on the south by England; and on the east by the North Sea, or German Ocean. Its area (inclusive of its numerous islands) is about 30,000 square English miles.

CAVES.—On the north, Dunnet Head, which is the most northerly point of Great Britain. On the east, Duncansby Head, Tarbet Ness, Kinnaird's Head, Buchan Ness, Button

* It is hardly necessary to observe that questions of this kind may be either extended or varied, at the discretion of the teacher. Those that are given above are intended rather to exemplify the kind of treatment of which the subject is susceptible, than designed to indicate any definite limit to exercises of this description. The more thoroughly such a mode of examination is pursued and on the map—the larger will be the amount of real knowledge to the learner.

Ness, Fife Ness, and St Abbs Head. Buchan Ness is the most easterly point.

On the west and south-west coasts, Cape Wrath, Ardnamurchan Point, the Mull of Cantire, Corsill Point, the Mull of Galloway, and Burrow Head. Ardnamurchan Point is the most westerly headland of Scotland, and the Mull of Galloway the most southerly.

COASTS.—The coast of Scotland is more indented than that of England, especially on the west and north. The broader indentations by which the sea penetrates the land are generally called *Friths*—the narrower inlets bear the name of *Lochs*.

On the east side of Scotland are the Frith of Forth, the Frith of Tay, the Moray Frith, and Cromarty Frith. On the west, Loch Broom, Loch Linnhe, Loch Fyne, the Frith of Clyde, Loch Long, Loch Ryan, Glenluce Bay, Wigton Bay, and the Solway Frith.

ISLANDS.—The Orkney Islands lie immediately to the north of the mainland of Great Britain, and are divided from it by the Pentland Frith. The Shetland Islands are at a further distance to the northward.

The Hebrides include a great number of islands lying off the west side of Scotland, and surrounded by the waters of the Atlantic Ocean. Some of them, as the islands of Skye, Mull, and Jura, are near the mainland, and only divided from it by narrow channels. Others, as Lewis, North Uist, and South Uist, are further off to seaward. The channel between Lewis and the mainland is called the Minsh. Lewis, Skye, Mull, Jura, and Islay, are the largest of the Hebrides. The small islets of Iona and Staffa, lying off the west side of Mull, are famous—Iona for its remains of ancient churches, and Staffa for its basaltic cavern.

Two large islands—Arran and Bute—are situated within the broader portion of the Frith of Clyde.

MOUNTAINS AND PLAINS.—In Scotland, as in England, the higher grounds lie chiefly on the western side of the island. But mountains cover a much larger proportional extent of Scotland than is the case with the English hills, and they reach a greater height. England is chiefly a level country, and mountains are exceptional to its general character: Scotland is principally mountainous, and its plains are of limited extent.

Scotland is naturally divided into the Highlands and the

Lowlands. The Highlands embrace the northern and western portions of the country: the Lowlands, its southern and eastern districts. The Lowlands of Scotland, however, are by no means level. They embrace numerous hilly tracts, but the hills are less elevated, and of more rounded form, with broader valleys between, than is the case in the Highlands.

The highest mountains of Scotland are the Grampians, which stretch across the country in the direction of east and west. Ben Nevis, which is the highest of the Grampians, reaches 4368 feet above the sea, and is the highest mountain, not only in Scotland, but in the British Islands. The Grampians are a vast mountain-region, which spreads over a large portion of the Highlands.

The other elevated districts of Scotland embrace the Sidlaw Hills (in Forfarshire and Perthshire), the Ochill Hills (in Fifeshire), the Pentland Hills (Edinburghshire), and the Lammermoor Hills (on the borders of Haddington and Berwick).

The division between the Highlands and the Lowlands is marked by a broad plain, called Strathmore,* which stretches across the island in the direction of north-east and south-west, from near Stonehaven on the North Sea, to Dumbarton on the Clyde. A narrower valley, called Glenmore, extends through the Highland region, and forms a complete natural division across the island.†

RIVERS.—Most of the larger rivers of Scotland belong to the east side of the island, and discharge their waters into the North Sea. The chief of them are the Tweed, the Forth, the Tay, the Dee, the Don, the Spey, and the Ness. Those on the west and south-west coasts are the Clyde, the Ayr, and the Nith.

The largest river of Scotland is the Tay, which forms at its mouth the estuary called the Frith of Tay. The Clyde and the Tweed are next in point of length: the former of them falls into the Frith of Clyde. The Clyde is commercially the most important of the Scotch rivers, because it is sufficiently deep in its lower part to admit ships of the largest size. Few of the other rivers are deep enough to be ascended by any other than small boats. Most of them have exceedingly rapid

* That is, "the great strath."

† It is through this valley that the Caledonian Canal has been formed, by joining the waters of the lakes which occupy a large portion of its bed. Glenmore means "the great glen."

courses; and many of the smaller streams form waterfalls, or cascades, in their passage through the hilly portions of the country.

LAKES.—Scotland abounds in lakes, especially its Highland region. Most of them are of long and narrow shape. The largest is Loch Lomond,* which borders on the counties of Stirling and Dumbarton. The mountain called Ben Lomond rises above its eastern shore.

The other principal lakes are Loch Tay, Loch Awe, Loch Ness, Loch Maree, and Loch Leven. The last-named, in the county of Kinross, is the only one amongst them that is within the Lowlands.

CLIMATE AND NATURAL PRODUCTIONS.—The climate of Scotland is slightly colder than that of England, owing to its more northerly situation. Within the Highlands, especially, the winter is more severe; rain is also more abundant there than in the Lowland region. The vegetation consists for the most part of plants of hardier growth than those of England. The Scotch fir, and other members of the pine tribe, are abundant upon the mountain-sides, and the heather imparts its purple colour to their lower slopes. Several of the richer fruits and plants that thrive on the southern coasts of England (as the peach and apricot) will not come to perfection in Scotland; and the hardier grains—oats and barley—are those most generally grown. Fine crops of wheat, however, are grown in many districts of southern Scotland.

The mineral resources of Scotland are very great. As in England, coal and iron are the staples of its wealth in this regard, and they form the basis of its manufacturing prosperity. Coal and iron occur in vast abundance within an extensive district of the Lowlands—that which stretches across the country from Fifeshire on the east side to Ayrshire on the west, embracing the extensive plain between the Friths of Forth and Clyde. Lead is worked in some districts of southern Scotland. Good building-stone also occurs there. Granite is obtained from the Grampians, and also from the Isle of Arran, and some other localities.

* The term *loch* is uniformly given to lakes in Scotland, as it also is to the narrow inlets of the sea upon the western and northern coasts, such as Loch Fyne, and others. There is, however, an important difference between the two. The inland *lochs*, such as Loch Lomond, have *fresh water*, like the lakes of England and other countries. The *lochs* that lie along the coast, such as Loch Fyne, are arms of the sea, and consist, consequently, of salt water.

POPULATION AND INDUSTRIAL PURSUITS.—Scotland is much less populous than England—both *absolutely* (that is, according to the actual number of its inhabitants) and *relatively* (or in the ratio of population to extent of surface). In 1851 it contained 2,870,000 inhabitants. The Lowland division of the country is much more populous than the Highlands.

The people of the Highlands and the Lowlands are distinct races, speaking different tongues. The language of the Lowlands resembles the English tongue: that of the Highlands is a distinct dialect, called the Gaelic. But the Highland population are gradually growing accustomed to the use of the English language, and their native tongue becomes, with each succeeding generation, less prevalent.

Manufactures and commerce are largely pursued in Lowland Scotland, chiefly within the coal and iron district between the Clyde and the Forth, and in the counties of Fife and Forfar, upon the eastern coast. The cotton manufacture, which is the first in order of importance, characterises Glasgow and the neighbouring tract of country on the western side of the island, within the counties of Lanark and Renfrew: the linen manufacture is found chiefly in the neighbourhood of the east coast—at Dundee, in Forfarshire, and Dunfermline, in Fifeshire. The making of woollen fabrics, as tartans (or plaids), carpets, &c., is pursued in many parts of the Lowlands, especially in the neighbourhood of Stirling and Kilmarnock.

In the Highlands, the rearing of cattle, with the extensive fisheries pursued off the coasts, are the principal branches of industry. In the southern Lowlands, also, great numbers of cattle are reared, chiefly for the supply of the English markets.

COUNTIES AND TOWNS.—Scotland is divided into thirty-three counties. They are of very unequal sizes, more so than the English counties. Clackmannanshire, the smallest, is only one-third part the size of Rutland. Inverness-shire, the largest among them, is nearly four-fifths the size of Yorkshire.

Thirteen of the counties are within that portion of Scotland which lies to the south of the Friths of Forth and Clyde, and are entirely within the Lowlands. The names of these thirteen are Edinburgh, Linlithgow, Haddington, Berwick, Roxburgh, Selkirk, Peebles, Dumfries, Kirkcudbright, Wigton, Ayr, Lanark, and Renfrew.

Three of the counties that are to the northward of the Frith of Forth are also wholly within the Lowland region—namely, Fife, Kinross, and Clackmannan.

In all, therefore, sixteen of the counties are comprised entirely within the Lowlands. Of the others, several are partly Lowland counties, and partly within the Highlands. All the counties that extend along the east coast of the country—Perth, Forfar, Kincardine, &c.—belong in part to the Lowland region; but they stretch westward into the rugged mountain-region of the interior, and their larger portion falls within the Highland limits.

Bute, Argyle, Inverness, Ross, Cromarty, and Sutherland, are almost exclusively Highland counties. Stirling, Dumbarton, Perth, Forfar, Kincardine, Aberdeen, Banff, Elgin, Nairn, and Caithness, are partly Highland. Buteshire consists of the two large islands of Arran and Bute, in the Frith of Clyde, with a few smaller islets.

The Orkney and Shetland Islands form a distinct county. Of the Hebrides, some belong to Argyle, some to Inverness, and others to Ross.

In several parts of Scotland, the ancient territorial names of particular districts are still familiarly used. Thus the three counties that extend along the southern shore of the Frith of Forth are known as the Lothians:—Edinburgh corresponding to Mid-Lothian, Haddington to East-Lothian, and Linlithgow to West-Lothian. The counties of Kirkcudbright and Wigton, in the south-west, are popularly known as Galloway. Forfarshire is still often referred to by its former name of Angus, and the county of Elgin by that of Moray (or Murray).

1. EDINBURGH, or Mid-Lothian, is distinguished by its agricultural industry, and also as the metropolitan county of Scotland. The city of *Edinburgh* occupies a striking situation near the shore of the Frith of Forth (about two miles distant), and a commanding rock which rises high above the Old Town is crowned by its castle—a strong fortress of ancient date, and the scene of numerous events of importance in Scottish annals. A broad valley forms a well-marked natural division between the New Town of Edinburgh and the older portion of the city. Holyrood, the ancient palace of the Scottish sovereigns, is within the Old Town, at the opposite extremity to the Castle Hill. Edinburgh is the seat of one of the Scottish Universities, and ranks as the literary metropolis

of the north. *Arthur's Seat*, a lofty crag rising to 822 feet above the sea, overlooks the city from the south-east.

Leith, on the coast of the neighbouring frith, forms the port of Edinburgh, and is joined to that city by continuous lines of building. On either side of Leith are numerous thriving fishing and trading ports—*Newhaven* and *Granton* to the westward, *Portobello* and *Musselburgh* on its eastern side. The battle of *Pinkie* (1547) was fought in the neighbourhood of *Musselburgh*, near the right bank of the little river *Esk*, which enters the frith at that point. *Dalkeith*, in the interior of the county, is a small town at the junction of the two arms of the river *Esk*.

2. *LINLITHGOW*, or *West-Lothian*, is a small agricultural county. Its chief town, *Linlithgow*, possesses the remains of an ancient palace. *Bathgate* is a thriving town in the interior.

3. *HADDINGTON*, or *East-Lothian*, is also agricultural. The town of *Haddington*, its capital, stands on the river *Tyne*—a less important stream than the English river of that name. *Dunbar*, a thriving port on the coast of this county, is of great note in Scottish annals, frequently besieged, and alternately in Scottish and English hands. Two battles fought in the immediate vicinity add to the chequered interest of its fortunes—one a victory gained by *Edward I.* over the army of *Baliol*, in 1296, the other a more important victory which *Cromwell* obtained over the Scottish army in 1650. *North Berwick*, on the coast of *Haddington*, lies at the entrance of the *Frith of Forth*. *Prestonpans*, also on the shore of the frith, and a few miles to the east of *Edinburgh*, is noteworthy for the defeat of the English forces by the troops of *Prince Charles Edward*, in 1745.

4. *BERWICK* (or the *Merse*, as it is called) adjoins the English border, reaching from the *Lammermoor Hills* to the banks of the *Tweed*. Its industry is chiefly agricultural. The county town is *Greenlaw*. The other towns are *Dunse*, *Coldstream*, *Earlston*, and *Eyemouth*—the last a seaport situated a short distance to the south of *St Abbs Head*.

5. *ROXBURGH* stretches from the banks of the *Tweed* to the summits of the *Cheviot Hills*, including the fine pastoral district of *Teviotdale*—watered by the river *Teviot*, an affluent of the *Tweed*. *Jedburgh*, its county town, is on the little stream of the *Jed*, which joins the *Teviot*. A few miles north-west of *Jedburgh* is *Ancrum Moor*, where the *Earl of Angus* defeated an English army, in 1545. *Hawick*, in upper *Teviot*—

dale, and *Kelso*, on the Tweed, are both of larger size. Melrose, famous for the ruins of its well-known abbey, and Abbotsford, the residence of Sir Walter Scott, are in this county, both on the south bank of the Tweed.

6. **SELKIRK**, a pastoral region, includes the tract of country called Ettrick Forest, watered by the river Ettrick, which joins the Tweed, receiving on its way the tributary stream of the Yarrow. The county town, *Selkirk*, is on the right bank of the Ettrick. On the opposite bank of the river is Philiphaugh, the scene of Montrose's surprise and defeat, in 1645. The town of *Galashiels*, to the northward of the Tweed (on the little river Gala), has a flourishing manufacture of woollen cloths.

7. **PEEBLES**, a pastoral region, embraces the upper portion of Tweeddale. The county town, *Peebles*, is on the north bank of the Tweed. *Inverleithen*, visited for the sake of its mineral waters, is further to the east, at the point where the little stream of the Leithen joins the Tweed.

8. **DUMFRIES**, which is agricultural in its lower grounds, and pastoral towards the interior, includes the greater part of Nithsdale (or the valley of the river Nith, which enters the Solway Frith), and also the valleys of the Annan and the Esk—Annandale and Eskdale. The town of *Dumfries*, its capital, stands on the left bank of the Nith: it is the largest town in the south-west portion of Scotland, and a great market for agricultural produce. *Annan* and *Moffat* are small places in this county.

9. **KIRKCUDBRIGHT** is chiefly pastoral. Its only town, of the same name, lies near the mouth of the river Dee, which enters the Solway Frith.

10. **WIGTON**, at the south-west extremity of Scotland, is also a pastoral region. The small town of *Wigton*, its capital, is on the shore of Wigton Bay. *Stranraer*, at the head of Loch Ryan, and *Port-Patrick*, on the shore of the North Channel, are small towns. Port-Patrick is only 22 miles distant from Donaghadee, on the coast of Ireland.

11. **AYRSHIRE** embraces a pastoral tract of country in the south and east, but includes a manufacturing and coal-mining district in the north, and along the sea-coast. Its county town, *Ayr*, at the mouth of the river Ayr, has considerable trade. Robert Burns was born in its vicinity—a short way to the southward, in a cottage beside the stream of the Doon. *Kilmarnock*, on the river Irvine, has extensive woollen manu-

factures. *Ardrossan, Salicoats, Troon, and Girvan*, are thriving seaports.

12. **LANARKSHIRE** includes Clydesdale, the upper part of which is a pastoral region. But its lower portion is a populous seat of manufacturing and commercial industry. *Glasgow*, on the banks of the Clyde, within the north-western border of Lanarkshire, is the centre at once of the cotton manufactures, the iron trade, and the foreign commerce, of Scotland. It is, indeed, the commercial metropolis of North Britain, and is greatly superior to any other city of Scotland in number of inhabitants. Glasgow is, besides, the seat of an ancient University. A short distance to the southward is the battle-field of Langside, the scene of the last contest on behalf of the ill-fated Mary Queen of Scots (A.D. 1568).

Airdrie, to the east of Glasgow, is in the midst of extensive coal and iron works, and has also cotton and other manufactures. *Hamilton* and *Lanark* are smaller towns. Below Hamilton, on the Clyde, is Bothwell Bridge, the scene of a well-known skirmish between the Covenanters and the Royal forces, in 1679. Lanark, in upper Clydesdale, is the county town. Below it are the picturesque Falls of the Clyde, formed by the descent of the river over successive ledges of rock.

13. **RENFREWSHIRE** is manufacturing and commercial. It includes part of the coal and iron district, and possesses several flourishing ports on the lower Clyde. *Renfrew*, the county town, is small and otherwise unimportant. But *Paisley*, seven miles west of Glasgow, shares in the manufacturing industry of that city. *Port-Glasgow* and *Greenock* are both on the Clyde; the latter is the seat of an extensive foreign trade. *Johnston*, south-west of Paisley, is an inland town.

14. **STIRLINGSHIRE** is manufacturing and trading in its eastern division, which is within the Lowland region; but its westerly portion stretches into the Highlands. The county town, *Stirling*, stands on the south bank of the Forth; its fine castle, on a lofty rock which overlooks the town, has been the scene of many events important in Scottish annals. Stirling has manufactures of woollen and cotton fabrics. *St Ninian's* and *Bannockburn*, both populous villages in its immediate vicinity (forming, in fact, suburbs of the town), also possess extensive woollen manufactures. Bannockburn recalls the memory of Bruce's great victory over the English, in 1314. *Falkirk*, in this county, is a great centre of trade, and is his-

torically noteworthy on account of two engagements which have taken place in its vicinity—one, a victory gained by Edward I. over the Scottish army (1298); the other, a defeat sustained by the royal forces at the hands of Prince Charles Edward's followers, in 1746. *Kilsyth*, on the southern border of the county, was the scene of Montrose's brilliant (though fruitless) victory, in 1646.

15. **CLACKMANNANSHIRE** is enclosed by the counties of Perth and Stirling. It is partly within the coal-field, and *Alloa*, its largest town (near the left bank of the Forth), has some trade in coal and iron. *Clackmannan* is the county town.

16. **KINROSS** is enclosed between the counties of Fife and Perth. It includes Loch Leven—the largest lake within the Lowland region. Its only town, *Kinross*, is on the west shore of the lake. The castle of Loch Leven, on an island in the lake, was the temporary prison of Mary Queen of Scots, and the scene of her romantic escape in 1568, immediately prior to the battle of Langside.

17. **FIFESHIRE**—a Lowland county—forms a peninsula, lying between the Friths of Forth and Tay. Its interior is hilly and pastoral, but a broad and fertile belt of country stretches along the coast, on which are numerous seaport and fishing-towns. *Cupar* is the county town. Among the other towns are *Dunfermline*, *Kirkcaldy*, *St Andrews*, and *Falkland*. Dunfermline is a great seat of the linen manufacture, and has an ancient abbey church, within which are the remains of Robert Bruce. St Andrews is the seat of the oldest of the Scottish Universities.

18. **PERTHSHIRE** is Lowland in the east and centre; but its western division includes an extensive and rugged portion of the Highlands. It comprehends, in the south-west, the romantic district of the Trosachs, within which are embraced the wooded heights of Ben Ledi and Ben Venue, with the winding shores of Loch Katrine, Loch Achray, and Loch Venachar.

The city of *Perth* lies on the right bank of the Tay, immediately above the estuary which the river forms in its lower course. Near Perth (upon the opposite bank of the river) is Scone, the ancient coronation-place of the kings of Scotland. Tippermuir, the scene of one of the victories gained by Montrose (in 1644), during his brilliant but evanescent career of success, is a short distance to the south-west of Perth.

The other towns of Perthshire—all of small size—are *Dumblane*, *Downe*, *Dunkeld*, and *Crieff*. Two miles to the eastward

of Dumblane is Sheriffmuir, the scene of an indecisive engagement between the royalist and rebel forces, in 1715. The Pass of Killiecrankie, on the romantic banks of the Garry, which joins the Tume^{*} below the defile, is in the northern part of Perthshire. It was here that the leader of the Highland clans, Viscount Dundee, fell in the moment of victory over the forces of King William, in 1689.

19. FORFARSHIRE, or Angus, is principally within the Lowland region, and is (with Fifeshire) the chief seat of the linen manufacture, which is extensively pursued in several of its towns. *Forfar*, the county town, lies in the heart of the great plain of Strathmore. *Dundee*, on the Frith of Tay, is of larger size, and is one of the most considerable of the Scottish seaports. *Montrose*, also a thriving seat of trade, is on the coast of the North Sea. Midway between Montrose and Dundee is *Arbroath* (or Aberbrothock), the nearest port to the celebrated Bell Rock, or Inchcape. *Brechin* and *Cupar-Angus* (so called to distinguish it from the county town of Fifeshire) are in this county.

20. KINCARDINE, or the Mearns, extends from Forfar to the banks of the Dee, and includes the most eastward portion of the Grampian range. But the coast-division of the county is Lowland. *Stonehaven*, the chief town, is on the shore of the North Sea; as also are *Bervie*, *Finnan*, and other fishing-ports.

21. ABERDEENSHIRE—a large county—is Lowland towards the coast; but its interior belongs to the Highlands. The city of *Aberdeen*, its capital, situated between the mouths of the rivers Dee and Don, is one of the most commercial places in Scotland, and is distinguished for its University. At the bridge of Dee, two miles above Aberdeen, Montrose defeated the Covenanters, in 1644.

Peterhead, a flourishing port, is on the coast to the northward. *Fraserburgh*, another seaport, is still further north. *Inverury*, at the junction of the little river Ury with the Don, is a small inland town. Balmoral Castle, the Highland residence of our gracious Queen, is in this county, within the beautiful valley of the upper Dee, near its southern bank.

22. BANFFSHIRE is chiefly Lowland, but penetrates the Highland region in its southerly division. Its chief town, *Banff*, is near the mouth of the river Doveran. *Portsoy* and *Cullen* are small towns on the coast.

23. ELGIN, or Moray, is Lowland in the north, but Highland

* The Tume is an affluent of the Tay.

in its southwardly portion. The town of *Elgin*, its capital, is a few miles distant from the coast, on the little river *Lossie*. *Forres* is further to the west, near the river *Findhorn*.

24. **NAIRNSHIRE**, a small county, is partly Lowland, but becomes hilly in the south. The town of *Nairn* is on a small river of that name, at its entrance into the *Moray Frith*. *Auldearn*, a village lying a few miles south of *Nairn*, was the scene of one of *Montrose's* victories, in 1645.

25. **BUTESHIRE**, the most southward of the Highland counties, consists of the islands of *Bute* and *Arran*, in the *Frith of Clyde*. The county town, *Rothesay*, is on *Bute*, which is moderately elevated. The channel which divides *Bute* from the mainland is called the *Kyles* of Bute*. *Arran* has a more rugged surface, and furnishes some granite: its only town is *Kilbride*, a small place on the east coast.

26. **DUMBARTONSHIRE** (or *Lennox*) is Highland and pastoral in its northerly division, including the chief part of the shores of *Loch Lomond*. In the south, it reaches to the banks of the *Clyde*. A detached portion of the county is in the plain further to the eastward. The chief town, *Dumbarton*, stands on the *Clyde*, at the mouth of the little river *Leven*, which forms the outlet of *Loch Lomond*. The vale of *Leven* is a busy scene of manufacturing industry, with cotton print and calico works, &c. *Kirkintilloch*, a manufacturing town, is to the north-east of *Glasgow*.

27. **ARGYLE** embraces a rugged Highland tract on the Scotch mainland, and includes many of the adjacent islands—amongst them *Mull*, *Jura*, and *Islay*; with *Coll*, *Tiree*, *Colonsay*, and many of smaller size. *Staffa* and *Iona*, off the west coast of *Mull*, are of the number. The county town is *Inverary*, near the head of *Loch Fyne*. *Campbelton*, on the peninsula of *Cantire*, is of larger size. *Oban* is a rising place on the western coast, near the entrance of *Loch Linnhe*. *Glencoe*, the scene of the infamous massacre of the *Macdonalds*, in 1692, is a wild pastoral valley, which adjoins the south shores of *Loch Leven*,† one of the estuaries of the western coast.

28. **INVERNESS** is entirely a Highland county. *Ben Nevis*,

* That is, *narrows*.

† There are two lochs bearing this name—one in *Kinross* (the scene of *Queen Mary's* confinement and escape); the other, that referred to above, on the border-line between the counties of *Argyle* and *Inverness*. This latter is an arm of the sea.

the highest mountain in Britain, is within its limits, which include a succession of bleak moorlands, high mountains, and narrow glens. The line of the Caledonian Canal crosses the county from north-east to south-west, passing through the narrow valley of Glenmore. The large island of Skye belongs to this county, as also do Harris, North and South Uist, and Benbecula, among those of the Hebrides lying farther to the westward.

The town of *Inverness*, regarded as the capital of the Highlands, stands at the entrance of the river Ness into Loch Beaul (as the upper extremity of the Moray Frith is called). A few miles east is Culloden Moor, the scene of Prince Charles Edward's final defeat, in 1746. Near Fort William, at the south-western extremity of the Caledonian Canal, and at the outlet of the river Lochie into Loch Eil, is Inverlochy, where Montrose gained, in 1645, the most brilliant of his victories. *Portree* is a small place on the east coast of Skye.

29. Ross comprehends a rugged Highland tract, which stretches across from the Moray Frith to the Atlantic coast. It includes Lewis, the largest of the Hebrides. The county town is *Tain*, on the Frith of Dornoch. *Dingwall*, farther south, is a small place at the head of Cromarty Frith. *Stornoway* is on the island of Lewis.

30. CROMARTY consists of several small and detached pieces of country, enclosed by Ross-shire and the adjacent county of Sutherland. Its only town is *Cromarty*, situated at the entrance of the magnificent estuary called Cromarty Frith—one of the finest of natural harbours.

31. SUTHERLAND is entirely Highland, and is the most thinly-populated county in Scotland. *Dornoch*, its only town, is on the east coast, upon the northern side of the frith to which its name is given.

32. CAITHNESS includes the north-eastern extremity of the Scotch mainland. Its chief town, *Wick*, is a flourishing sea-port—the chief seat of the herring-fishery. *Thurso* is on the north coast of the island.

33. The county of ORKNEY and SHETLAND consists of the groups of islands so called. *Kirkwall*, situated on the largest of the Orkneys (called Pomona, or Mainland), is the county town. *Lerwick*, the principal town in the Shetlands, is on the east coast of Mainland, as the principal island of that group is named.

EXAMINATION QUESTIONS.

1. How is Scotland bounded?
2. Name the principal capes of Scotland, and point to them on the map.
3. Point out upon the map the following estuaries—the Frith of Forth, Frith of Tay, Moray Frith, Loch Linnhe, Loch Fyne, the Frith of Clyde, and Gulluce Bay.
4. Enumerate the principal islands of Scotland, giving their situation with reference to the mainland.
5. What great natural division has Scotland, with reference to the features of its surface?
6. In what parts of Scotland are the following—Strathmore, Glenmore, the Grampian Mountains, the Ochil Hills, and the Pentland Hills? Point to each on the map.
7. Name the highest mountain in Scotland, with its elevation in feet.
8. Point on the map to the principal rivers of Scotland, giving their names.
9. Name the principal lakes of Scotland? Which is the largest among them?
10. In what respect does the climate of Scotland differ from that of England?
11. What minerals occur in Scotland, and in what parts of the country?
12. Point out on the map the limits of the coal and iron district of Scotland.
13. Is Scotland more populous, or less so, than England? What portions of the country are most numerously peopled?
14. In what parts of Scotland are the cotton and linen manufactures most extensively carried on?
15. What constitutes the chief industrial pursuit of the Highland population?
16. Into how many counties is Scotland divided? Name the largest, and the smallest, of the number.
17. Are the counties of Edinburgh, Dumfries, and Lanark, within the Highlands or the Lowlands?
18. Are Argyle and Inverness Highland or Lowland counties?
19. Several of the counties are partly Highland and partly within the Lowlands: name some of the number.
20. Which two of the counties are entirely insular?
21. What three counties are called also by the names of West, Mid, and East Lothian?
22. Point out on the map the following places—Edinburgh, Glasgow, Dumfries, Kilmarnock, Dundee, Aberdeen, and Inverness.
23. In what counties are the following towns respectively situated—Dunbar, Kelso, Paisley, Falkirk, Montrose, St Andrews, Dunfermline, and Inverary?
24. Of what branches of manufacturing industry are Glasgow and Paisley the seat?
25. What manufacture is carried on chiefly at Dunfermline, Dundee, and other places on the east side of Scotland?
26. In what counties are the battle-fields of Bannockburn, Pinkie, Prestonpans, and Culloden?
27. Point out the site of the following battle-fields—Langside, Kilsyth, Sheriffmuir, and Inverlochy.
28. In what part of Scotland is the district of the Trossachs? By what is it distinguished?
29. Where is the pass of Killiecrankie, and for what is it noteworthy?
30. To what county do the islands of Staffa and Iona belong? Point to their locality on the map, and say for what they are celebrated.
31. Name the chief towns of each of the following counties—Bute, Kincardine, Ross, Sutherland, and Orkney and Shetland.

IRELAND.

SITUATION, BOUNDARIES, AND EXTENT.—IRELAND lies to the west of Great Britain. Upon three sides—the north, west, and south—it is bounded by the Atlantic Ocean; upon the east, by the Irish Sea, which divides it from the coasts of England and Wales. The Irish Sea is connected with the Atlantic by two channels—the North Channel and St George's Channel. The North Channel flows between the coasts of Ireland and Scotland. St George's Channel divides Ireland and Wales. In size, Ireland is equal to 32,500 square miles.

CAVES.—In the north, Fair Head (or Benmore), Malin Head, and Horn Head; on the west, Rossan Point, Achil Head, Slyne Head, Loop Head, Dunmore Head; in the south, Mizen Head, Cape Clear, and Carnsore Point; on the east coast, Wicklow Head and Howth Head.

Malin Head is the most northerly point of Ireland, Dunmore Head the most westerly, and Mizen Head the most southwardly. Cape Clear is a small island which lies off the south-west coast.

GULFS AND BAYS.—The west and south-west coasts of Ireland are more indented than the eastern side of the island. The principal inlets are—in the east, Dublin Bay, Dundalk Bay, Lough Carlingford, Dundrum Bay, Lough Strangford, and Belfast Lough; in the north, Lough Foyle and Lough Swilly; in the west, Donegal Bay, Sligo Bay, Clew Bay, Galway Bay, the estuary of the Shannon, Dingle Bay, Kenmare Bay, and Bantry Bay; in the south, Cork Harbour, and Waterford Harbour.

MOUNTAINS AND PLAINS.—Ireland is generally level in the interior, but has mountain-tracts adjoining various portions of its coast. The highest mountains are in the south-west corner of the island, within the county of Kerry: the most elevated amongst the Mountains of Kerry reaches 3404 feet above the sea. The next in point of elevation are the Mountains of Wicklow, near the east coast, which reach upwards of 3000 feet. The Mourne Mountains, in the county of Down, are nearly as high. The Mountains of Donegal, in the north-west, and the Mountains of Connemara, in the west (to the north of Galway Bay), are also very elevated.

A nearly level plain extends across the middle part of the island, from Dublin Bay on the east to Galway Bay on the west. In some parts of this plain, and also in the

various mountain-regions, there are extensive bogs. These bogs furnish abundance of peat (used as fuel), and are capable, when drained, of being brought under cultivation.

RIVERS.—Ireland abounds in inland waters. The longest river is the Shannon, which rises in the county of Cavan, and enters the Atlantic Ocean, after a course of 224 miles. The Shannon is longer than any other river in the British Islands, with the exception of the Severn, and it waters (with its tributaries) a larger extent of country than any other stream.

The other principal rivers are—in the south, the Bandon, the Lee, the Blackwater, the Barrow, and the Suir; in the east, the Slaney, the Liffey, the Boyne, and the Lagan; in the north, the Bann and the Foyle. The Barrow, which is second in length among the Irish rivers, is joined by the Suir, and the two form the estuary of Waterford Harbour. The Lee enters Cork Harbour. The Liffey, which enters Dublin Bay, has the metropolis of Ireland on its banks.

LAKES.—The largest lake in Ireland is Lough Neagh,* in the province of Ulster. Lough Neagh is larger than any other lake in the British Islands—more than three times the size of Loch Lomond, in Scotland, and fourteen times larger than Windermere, in England.

The other principal lakes are Lough Erne, Lough Ree, Lough Derg, Lough Mask, Lough Corrib, and the Lakes of Killarney. Lough Ree and Lough Derg are within the course of the river Shannon. The Lakes of Killarney, in Kerry, are celebrated for their beautiful scenery. The highest mountains in Ireland rise immediately above their western shore.

CLIMATE AND NATURAL PRODUCTIONS.—The climate of Ireland is moister than that of England. This preserves a more constant verdure to the fields, and a superior freshness and brightness of colour to its general vegetation. The winters are nearly always mild, and the prevalent winds, which are from the west, are laden with the warm and moist vapours derived from the waters of the Atlantic. The vegetation native to the coasts of Kerry (the south-westernmost county) is especially distinguished for its rich luxuriance.

In respect of mineral produce, Ireland is inferior to England and Scotland in one essential particular—coal. This affects injuriously its manufacturing industry. The coal-fields of Ireland—diffused, at wide distances apart, through the north-

* The term *lough*, in Ireland, is equivalent to *loch* in Scotland. It is given both to inland lakes and to the nearly land-enclosed estuaries of the coast.

east, midland, and south-western counties—are of limited extent compared to those of Great Britain, and their produce small in amount. Peat is the fuel most generally consumed, but coal is imported from the English and Scotch sea-ports.

Ireland has ores of copper, lead, iron, and other mineral produce, and possesses a rich variety of marbles and building-stones.

POPULATION AND INDUSTRIAL PURSUITS.—Ireland is much more populous than Scotland, but less so than England. It contained in 1851 six-and-a-half millions of inhabitants, which is a smaller number (by upwards of a million-and-a-half) than had belonged to it ten years earlier. But vast numbers of the Irish people emigrated to other lands during the intervening period; and famine, with its attendant sickness and suffering, contributed to thin the ranks of the people.

The great majority of the Irish population belong to the Celtic race—the same that peoples the Highlands of Scotland and the mountain-region of Wales. It is chiefly in the province of Ulster (the north-east part of the island) that the Anglo-Saxon race is found settled on Irish soil. The people of Ulster are the descendants of immigrants from the Scotch lowlands, and preserve the social habits and industry of Scotland. People of English descent are numerous in the neighbourhood of Dublin, and are also scattered over every portion of the island. The native language of Ireland is becoming superseded by the English tongue.

Ireland is chiefly an agricultural country, and a very large portion of the land is in pasture. Cattle and pigs, with various farm-produce, constitute (over by far the greater part of the island) its chief industrial wealth. Manufactures flourish principally in Ulster, where the linen-manufacture is pursued on a scale of great extent. Woollen and cotton goods are also made, but in smaller quantity. A great part of the commerce of Ireland consists in the supply of its agricultural produce to the English markets, and in the import of coal, with various articles of British and foreign produce.

COUNTIES AND TOWNS.—Ireland is divided into thirty-two counties, and into four provinces. The provinces are Leinster, Ulster, Connaught, and Munster,—Leinster in the east, Ulster in the north, Connaught in the west, and Munster in the south.

The province of Leinster contains twelve counties—Dublin, Wicklow, Wexford, Kilkenny, Carlow, Kildare, Queen's County, King's County, Westmeath, Longford, Meath, and Louth.

Ulster contains nine counties—Armagh, Down, Antrim, Londonderry, Donegal, Tyrone, Fermanagh, Monaghan, and Cavan.

Connaught includes five counties—Leitrim, Roscommon, Sligo, Mayo, and Galway.

Munster contains six counties—Clare, Limerick, Tipperary, Waterford, Cork, and Kerry.

LEINSTER.—The principal towns in this province are as follow, the name of the county-town being in each case distinguished by italic letters :—

County.	Towns.	County.	Towns.
DUBLIN.....	<i>Dublin</i> , Kingstown.	QUEEN'S COUNTY.....	<i>Maryborough</i> .
WICKLOW.....	<i>Wicklow</i> , Arklow.	KING'S COUNTY.....	<i>Tullamore</i> , Parsons-
WEXFORD.....	<i>Wexford</i> .		town.
KILKENNY.....	<i>Kilkenny</i> .	WESTMEATH.....	<i>Mullingar</i> , Athlone.
CARLOW.....	<i>Carlow</i> .	LONGFORD.....	<i>Longford</i> .
KILDARE.....	<i>Athy</i> , <i>Naas</i> , May-	MEATH.....	<i>Trim</i> , Navan.
	nooth.	LOUTH.....	<i>Dundalk</i> , Drogheda.

DUBLIN, the metropolis of Ireland, stands at the mouth of the river Liffey. It is less populous than either Manchester, Liverpool, or Glasgow, but is a great seat of trade, and has numerous fine public buildings. Dublin has the rank of an archiepiscopal city, and possesses two cathedrals. It is also the seat of a Protestant university. *Kingstown*, the resort of a great amount of shipping, lies on the south side of Dublin Bay. A short distance to the south of Dublin begins the romantic district of the Wicklow Mountains.

Kilkenny, on the river Nore (an affluent of the Barrow), is second among the towns of Leinster in point of population, and is the largest inland town in the island. *Wexford*, at the outlet of the river Slaney into Wexford Haven, is a port of considerable trade. *Drogheda* and *Dundalk*, to the northward of Dublin, are also flourishing commercial ports. *Drogheda* stands on the river Boyne, near its mouth: the battle of the Boyne, in 1690, between the armies of William III. and James II., was fought on the banks of the river, a short distance above the town. *Athlone*, on the Shannon, below its issue from Lough Ree, is a thriving inland town, partly in Leinster and partly in Connaught.

ULSTER.—The principal places in Ulster are named in the following table :—

County.	Towns.	County.	Towns.
ARMAGH	Armagh, Portadown.	DONEGAL	Lifford, Ballyshannon.
DOWN	Downpatrick, Newry, Donaghadee.	TYRONE	Omagh, Strabane.
ANTRIM	Belfast, Lisburn, Carrickfergus.	FERMANAGH	Enniskillen.
LONDONDERY ...	Londonderry, Coleraine.	MONAGHAN	Monaghan.
		CAVAN	Cavan.

Belfast is the largest city of Ulster, and the chief seat of the linen manufactures of Ireland. It has also manufactures of cotton, with potteries, glass-works, &c., and a larger amount of foreign trade than any other city in the island. *Armagh* has a great share in the linen manufacture, and is an archiepiscopal see—the ecclesiastical metropolis of Ireland. *Londonderry*, on the river Foyle, has considerable trade, and is famous in story for the gallant defence made by its Protestant inhabitants against the besieging army of James II., in 1689. *Coleraine*, in the same county, near the mouth of the Bann, is a flourishing port.

The Giant's Causeway, on the north coast of Antrim, is one of the chief natural wonders of the kingdom ; it is a vast assemblage of columns of basaltic rock, which line a part of the shore, and advance, by successive rows, into the sea.

CONNAUGHT.—The chief towns of Connaught are as follow :—

County.	Towns.	County.	Towns.
LEITRIM	Carrick-on-Shannon.	MAYO	Castl bar, Westport.
ROSCOMMON	Roscommon.	GALWAY	Galway, Tuam.
SLIGO	Sligo.		

Galway, seated on the shore of the fine bay called by its name, and at the mouth of a stream which issues from Lough Corrib, is the largest town of Connaught. Its position on the western coast of the island gives it importance as a packet-station for the arrival and departure of vessels communicating with the other side of the Atlantic. Some distance to the westward begins the romantic tract of country known as Connemara, a region of alternate hills and valleys, with enclosed lakes and mountain-streams. *Aughrim*, a village in the eastern part of the county (a few miles distant from the right bank of the Suck), witnessed a decisive victory gained by the army of William III. over the troops of James II., in 1691. *Sligo*, a port at the head of Sligo Bay, has considerable trade.

MUNSTER includes the following towns:—

County.	Towns.	County.	Towns.
CLARE.....	Ennis.	WATERFORD.....	Waterford, Dungarvan.
LIMERICK.....	Limerick.	CORK	Cork, Youghal, Bandon, Kinsale.
TIPPERARY.....	Clonmel, Carrick-on-Shannon, Thurles, Cashel.	KERRY	Tralee, Killarney.

Limerick is second in size among the cities of Munster, and is rich in historic memories. It was in former days the stronghold of the Roman Catholic cause, and sustained two memorable sieges in behalf of King James II., in 1690-1. Limerick stands on either bank of the Shannon, a short way above the estuary. *Clonmel*, on the Suir, is an inland town of some importance. *Waterford*, also on the Suir, a short way above its junction with the Barrow, shares largely in the export trade of the island, and has extensive commercial relations with Bristol.

Cork is the third city in Ireland in point of population, and is largest among the cities of Munster. It stands on the Lee, immediately above the entrance of that river into Cork Harbour. Cork has great foreign trade. *Queenstown* (at which the larger class of vessels belonging to Cork load and discharge their cargoes) is on an island in Cork Harbour. *Youghal* and *Kinsale* (one to the east, the other westward, of Cork) are thriving seaports, at the mouths, respectively, of the rivers Blackwater and Bandon.

The varied character of the south-western shores of Ireland deserves especial notice. Of its many inlets, the finest is Dingle Bay, which penetrates the land for upwards of thirty miles. Valentia Island lies at its entrance, on the southern side. The beautiful Lakes of Killarney, in this part of Ireland, are three in number—an Upper, Middle, and Lower Lake. The town of *Killarney* is close beside the lower lake.

GOVERNMENT, RELIGION, &c.—The United Kingdom of Great Britain and Ireland constitutes, in form of government, a hereditary and limited monarchy. The executive power is in the hands of the Sovereign: the legislative power is divided between the Sovereign, the House of Peers, and the House of Commons—the last being a representative assembly, elected by qualified classes of the people at large. The House of Commons alone has the right to regulate the taxes and ex-

penditure of the kingdom, and the Ministers of the Crown are responsible to it for their public proceedings. The people of the British Islands thus enjoy the blessings of a free constitution. The expression of opinion is free to all classes.

The Protestant religion almost uniformly prevails in England and Wales, and also in Scotland. The established form of worship in the former country is that embodied in the ritual of the Church of England, from which, however, there are numerous dissenting communities. The English Church is under the government of two archbishops and twenty-six bishops.

In Scotland, the Presbyterian Church, under the General Assembly of Divines, is the established form of church government. But there is a numerous body of seceders from its ranks.

The Established Church of Ireland is a branch of the Anglican Church, under two archbishops and ten bishops. But the majority of the Irish people are Roman Catholics.

COLONIES.—Besides Great Britain and Ireland, the British Empire embraces a vast number of colonies and dependencies, including amongst them territories in every quarter of the globe. These are briefly enumerated in the following list :—

IN EUROPE,

The Channel Islands.
Island of Heligoland.
Gibraltar.
Maltese Islands.
Ionian Islands.

IN ASIA.

British India, comprising Bengal, Madras, and Bombay; Ceylon, and the provinces east of the Bay of Bengal, with Penang, Malacca, and Singapore.
Aden (in Arabia).
Hong-Kong (China).
Labuan (Borneo).

IN AFRICA.

The River Gambia }
Sierra Leone } West Africa.
The Gold Coast }
The Cape of Good Hope } South Africa.
Natal }
Ascension : St Helena : Mauritius.

IN AMERICA.

Canada.
New Brunswick.
Nova Scotia and Cape Breton Island.
Prince Edward Island.
Newfoundland.
British Columbia and Vancouver Island
Hudson Bay Territory.
West Indies (Jamaica, &c).
British Guiana.
Bermuda Islands.
Falkland Islands.

IN AUSTRALIA.

New South Wales.
Victoria.
South Australia.
Western Australia.
Queensland.
Tasmania (or Van Diemen's Land).

IN POLYNESIA.

New Zealand.

QUESTIONS ON IRELAND, &c.

1. By what is Ireland divided from Great Britain, and how is it bounded?
2. Name the principal capes of Ireland.
3. Distinguish between the portions of Ireland that are mountainous, and those which possess a level surface.
4. In what county are the highest mountains of Ireland situated? What is their altitude?
5. What is the name of the longest river in Ireland? Trace out its course on the map, and say into what sea it flows.
6. Enumerate the other chief rivers of the island.
7. Name the principal lakes of Ireland, and say which is the largest.
8. What proportion does Lough Neagh bear, in respect of size, to the largest of the Scotch and English lakes?
9. Which two of the lakes belong to the course of the Shannon?
10. By what is the climate of Ireland distinguished from that of England?
11. What mineral produce has Ireland? In what particular, in this regard, is it inferior to Great Britain?
12. Is Ireland more or less populous than England and Scotland? Name the amount of its population, in round numbers.
13. To what race do the majority of the Irish people belong?
14. In what respect do the people of Ulster differ from the population of the island in general?
15. In what does the industrial produce of Ireland chiefly consist?
16. In what part of the island does manufacturing industry flourish most, and what is the chief article of produce?
17. Into what number of counties, and into how many provinces, is Ireland divided? Name the provinces.
18. How many counties are in Leinster? How many in Ulster, Connaught, and Munster, respectively?
19. Name the counties within Leinster.
20. Name the counties within Ulster.
21. Name the counties within Connaught.
22. Name the counties within Munster.
23. In what counties are Dublin, Athy, Maryborough, Tullamore, and Dundalk, respectively?
24. On what rivers are Dublin, Kilkenny, Wexford, Drogheda, and Athlone?
25. What noteworthy event distinguishes the neighbourhood of Drogheda? At what period?
26. What place ranks first, in point of size, among the cities of Ulster, and by what kind of industry is it distinguished?
27. What city ranks as the ecclesiastical metropolis of Ireland, and in what county is it?
28. On what rivers are Londonderry and Coleraine situated?
29. What historical event distinguishes Londonderry?
30. Where is the Giant's Causeway, and of what does it consist?
31. Name the largest city of Connaught, and point to it on the map.
32. In what county is the village of Aughrim, and for what is it noteworthy?
33. What place is largest, and what second in size, among the cities of Munster?
34. Upon what rivers are Cork, Kinsale, Limerick, Waterford, and Clonmel?
35. For what is Limerick historically distinguished?
36. In what county are the Lakes of Killarney?
37. Under what form of government are the British Islands?
38. What form of religious worship prevails in England, Scotland, and Ireland, respectively?
39. What colonies or dependencies does Great Britain possess in Europe?
40. What colonies or dependencies does Great Britain possess in Asia?
41. What colonies or dependencies does Great Britain possess in Africa?
42. What colonies or dependencies does Great Britain possess in America?
43. What colonies has Great Britain in Australia and Polynesia?

FRANCE.

SITUATION, BOUNDARIES, AND EXTENT.—France lies on the western side of Europe. It stretches across the continent, from the shores of the ocean to the waters of the Mediterranean. It approaches nearer to Britain than any country on the European mainland—the strait of Dover, which divides the opposite shores of France and Britain, being only twenty-one miles across. Upon the north, France is bounded by the English Channel and by Belgium; on the east by Germany, Switzerland, and part of Italy; on the south by the Mediterranean Sea, and by Spain; on the west by the Bay of Biscay. France is about four times larger than England, its area amounting to 203,700 square miles.

COASTS.—France has three lines of sea-coast. Two of them are continuous—the Channel and the Bay of Biscay; the third belongs to the Mediterranean. It is therefore well situated for maritime commerce. The most conspicuous headland is Cape de la Hague, on the coast of the Channel.

ISLANDS.—At the entrance of the English Channel, Ouessant (or Ushant): in the Bay of Biscay, Belle Isle, Ré, Oléron, and a few others. In the Mediterranean, the group called Iles d'Hières, near the coast, and the large island of Corsica, which forms one of the departments.

MOUNTAINS AND PLAINS.—France is in general a level country. But it is mountainous on some parts of its border-line, and is hilly in portions of the interior, towards the centre and east.

The Alps divide France (in the south-east) from Italy, and rise above the snow-line.* Mont Pelvoux, one of the highest points of the Alps, is within the French border. Mont Viso and Mont Genève are on the frontier-line of France and Sardinia. The chains of Mount Jura—less elevated than the Alps—extend along the border of France and Switzerland.

The Pyrenees form the border between France and Spain, and are snow-covered in their higher peaks and ridges, though not so high as the Alps. The Pic du Midi, one of their loftiest points, is within the French border: Maladetta, Mont Perdu, and others, are on the frontier line.

* That is, above the line at which, owing to the low temperature consequent on extreme height, the snow never melts. The height of the snow-line in the Alps is between 8000 and 9000 feet above the sea.

A long chain of hills, only moderately elevated, stretches through the east of France, in the direction of south-west and north-east. These hills are called the Cevennes in their southern division, and the Vosges further to the northward. The Cevennes bound on the west the valleys of the Rhone and Saone: the Vosges form the western limit of a portion of the Rhine valley. To the westward of the Cevennes, and within the former province of Auvergne, is a group of hills which exhibit numerous extinct volcanoes, marked by their conical summits and the remains of lava and ashes which have issued from them in former ages.

With the above exception, France has a level, or merely undulating, surface. In the south-west corner of the country, between the lower Garonne and the base of the Pyrenees, there is a remarkable tract known as the *Landes*, which is a flat sandy waste—lined by sand-hills along the coast, and backed by pine-forests towards the interior. The shepherds of the *Landes* pursue their avocation upon stilts, in order to be above the reach of the sand-drifts.

RIVERS.—France has four considerable rivers, beside many of less size. The four great rivers are the Seine, the Loire, the Garonne, and the Rhone. The first three are entirely within the French territory. The upper part of the Rhone (above the lake of Geneva) belongs to Switzerland. The Seine flows into the English Channel; the Loire and Garonne into the Bay of Biscay; the Rhone into the Mediterranean.

The Rhine forms part of the border-line of France, on the side of Germany. The upper portions of the Moselle and Meuse are within France.

CLIMATE AND NATURAL PRODUCTIONS.—France is, on the whole, a warmer country than England, especially in the south. The air is generally drier than in our own country. In the north of France, however, the winters are often severe.

In passing from the shores of the Channel to the Mediterranean, the character of the vegetation shows the gradual rise of temperature. The vine is abundantly grown in the east, centre, and south of France, and the olive, the mulberry, and the fig, flourish in the plains that adjoin the Mediterranean coast. It is in the east of France, within the provinces of Champagne and Burgundy, that the wines bearing those names are produced. A district of the south-west, adjoining the river Garonne, furnish the wines known as claret.

In mineral produce, France, though inferior to England, is

yet rich. Coal is much less abundant than is the case in Britain, but iron is plentifully distributed, and several other metals occur. Mineral springs are numerous, especially in the neighbourhood of the Pyrenees.

POPULATION AND INDUSTRY.—France contains 36,000,000 of inhabitants—a population which is less dense (relatively to size) than that of Britain, but which is numerically great. A large proportion of the people are engaged in agricultural labours—in the culture of wheat and other grains in the northern and central parts of the country, of the vine and the olive in the south. Wines and brandy are important articles of French produce. Beetroot is largely grown in the north of France, for the purpose of making sugar from it.

France is likewise a great manufacturing and commercial country—ranking only second to Britain in these regards. The silk manufacture is the distinguishing feature of French manufacturing industry; but woollen, linen, and other textile fabrics, are also made on a very extensive scale. The silk manufacture is chiefly pursued in the south, at Lyons, Nismes, Avignon, &c.: the woollen manufacture principally in the north, at Rouen, Amiens, and elsewhere. Fine linens and lace are also made in the north of France: cotton goods chiefly in the north and east.

The making of gloves is an important branch of French manufacturing industry. Watches and clocks, ornamental china and glass, jewellery, perfumes, artificial flowers, and various articles of finery, are also characteristic of French taste and skill.

The great articles of export from France are silks and ribbands, wine and brandy, gloves, and the various other articles mentioned above. The foreign commerce is very considerable, and extends to the most distant parts of the globe. The ports of Marseilles, Bordeaux, and Havre, are the chief seats of maritime trade. Bordeaux, especially, is distinguished as the emporium of the wine trade.

France has an extensive system of railways, which connect nearly all the principal towns, and are still in process of extension.

DIVISIONS AND TOWNS.—France is divided into eighty-six departments, the larger number of them named after the rivers which flow through them—as the departments of Seine, Marne, Meuse, Moselle, Loire, Charente, &c. Some derive their names from the mountains which they adjoin, as the

departments of Upper and Lower Alps, Upper and Lower Pyrenees, and Vosges. The island of Corsica forms one of the departments.

Previous to the great revolution, in the closing years of the last century, France was divided into thirty-four provinces. The names of many of these provinces are continually referred to in the pages of history. Among them are Picardy, Normandy, Brittany, Guienne, Gascony, Navarre, Languedoc, Provence, Dauphiny, Auvergne, Burgundy, Champagne, Lorraine, Alsace, Isle of France, Anjou, and Maine. Their relative positions can only be properly learnt from the map.

PARIS, the capital of France, stands on either bank of the river Seine, and partly upon an island in the river. It has upwards of a million and a quarter of inhabitants—a greater population than belongs to any other city of Europe, excepting London. Paris is rich in fine public buildings and works of art, and ranks as the centre of fashion and refinement. *Ver-sailles*, famous for its magnificent royal palace and gardens, is a few miles to the south-west of Paris.

Rouen, an ancient city, the former capital of Normandy, on the lower Seine, is a great seat of the woollen manufacture. *Havre*, at the mouth of the river, is the chief emporium of foreign trade on the French side of the channel, and constitutes the port of Paris. Among the other places of note within the valley of the Seine and its tributaries are *Troyes*, the ancient capital of Champagne (on the upper Seine), and *Rheims*, formerly the ecclesiastical metropolis of France, and in the cathedral of which its monarchs were crowned. Rheims is in the plain between the Marne and the Aisne, two of the tributaries of the Seine.

To the northward of the Seine valley are the following :—*Amiens* (the former capital of Picardy), an ancient city on the river Somme, which enters the Channel. Below Amiens, on the same river, is *Abbeville*. At the mouth of the Somme is *St Valery*, the port whence William of Normandy finally sailed for the shores of England, in 1066. *Dieppe*, a flourishing seaport, is to the westward of the Somme. To the north of the Somme is the small town of Cressy, and, still further north, the village of Agincourt—names which recall the triumphs of the English arms in 1346 and 1415. *Boulogne* and *Calais* are seaports on the French side of the narrow strait

which divides the adjacent shores of France and England. *Dunkirk*, a place formerly of great name in history, is to the east of Calais. *Lille*, *Valenciennes*, and *Arras*, are considerable inland towns; the two former near the Belgian frontier.

The following towns are situated within the basin of the river Loire :—

Orleans, an ancient city in the heart of the country, on the north bank of the Loire : *Tours*, also on the Loire, lower down, distinguished as a seat of the silk manufacture : *Nantes*, a flourishing port near the mouth of the river : *Poitiers*, on a small tributary of the Vienne (which joins the Loire), noted in history for the victory gained by the Black Prince, in 1356 : *St Etienne*, to the east of the Upper Loire, the chief seat of the iron-works of France.

Within the tract of country lying between the Lower Seine and Loire—bordering partly on the Channel and partly on the Bay of Biscay—are the following places :—

Rennes, the ancient capital of Brittany, on the river Vilaine, which enters the Bay of Biscay : *Caen* (on the river Orne, which flows into the channel), the favourite residence, and the burial-place, of William the Conqueror : *Cherbourg*, a strongly-fortified sea-port and naval arsenal, on the coast of the channel, nearly opposite to the Isle of Wight : *St Malo*, a port on the coast of Brittany : and *Brest*, an important naval station, at the western extremity of Brittany, upon a fine harbour formed by an inlet of the Atlantic.

The following are within the valley of the Garonne :—

Toulouse, the former capital of Languedoc, an inland city on the upper Garonne : *Bordeaux*, the great port of the wine-trade, near the mouth of the river, at the head of the estuary called the Gironde. Bordeaux was long in possession of the English,* and was the birth-place of our King Richard II.

In the tract of country lying between the mouths of the Garonne and the Loire are :—

La Rochelle, a seaport on the Bay of Biscay, famous in history for the prolonged siege in 1627–8, when it formed the stronghold of the French Protestants : *Rochefort*, a naval

* From 1154 to 1450—a term of nearly three centuries.

station, near the mouth of the river Charente : *Cognac*, also on the Charente, higher up the river, the centre of the brandy-produce.

To the south of the Garonne, towards the foot of the Pyrenees, is the valley of the river Adour. *Bayonne*, at the mouth of the Adour, is a commercial port. *Pau*, an inland town on a tributary of the same river, was the birth-place of Henry IV. of France.

The following towns are within the basin of the Rhone :—

Dijon, the former capital of Burgundy, to the west of the Saone : *Besançon*, an ancient and strongly-fortified city (the former capital of Franche-Comté), on the river Doubs, towards the Swiss border : *Lyons*, at the junction of the Saone and the Rhone, the great seat of the silk manufacture, and the second city of France in point of population : *Avignon*, important in ecclesiastical history, situated on the left bank of the Rhone, within its lower course : and *Nismes*, in the plain west of the river, a seat of the silk manufacture.

To the south-west of the Rhone valley, along the shore of the Gulf of Lyons, are :—

Montpellier, *Cette*, and *Narbonne*. *Cette*, which is on the coast, is an important commercial town, the eastern outlet of the great Canal du Midi (or Canal of Languedoc), which connects the river Garonne with the Mediterranean.

On the coast to the eastward of the Rhone, are—

Marseilles, the chief seat of French commerce in the Mediterranean, and a place of early historic fame, having been founded by a body of Phocæan colonists, in the sixth century before the Christian era : *Toulon*, further to the east, a great naval station and arsenal.

In the north-east division of France, within the valleys of the Rhine and the Moselle, are the following towns :—

Strasbourg, a large and strong city near the left bank of the Rhine (on a small tributary called the Ill), the former capital of Alsace : *Mulhausen*, nearer the Swiss border, the chief seat of the cotton manufactures of France : *Nancy*, the former capital of Lorraine, on a tributary of the Upper Moselle : *Metz*, a fortified city on the Moselle.

The island of Corsica contains the small towns of Bastia and Ajaccio, the latter celebrated as the birth-place of Napoleon Buonaparte.

GOVERNMENT, &c.—The government of France is monarchical, the sovereign bearing the title of Emperor. The administration assumes, in every respect, the form of a military despotism, and a large standing army is maintained.

The great majority of the French nation are followers of the Church of Rome, but full toleration is allowed to the members of the various Protestant Churches. The ministers of religion are supported by the State, out of the public funds.

COLONIES.—The foreign possessions of France are—Algeria, on the north coast of Africa : St Louis, at the mouth of the Senegal, and Goree, near Cape Verde, in Western Africa : the island of Réunion, or Bourbon, in the Indian Ocean : the islands of Martinique and Guadeloupe, with a few of less size, in the West Indies : French Guiana, in South America : the little islands of St Pierre and Miquelon, in the Gulf of St Lawrence : New Caledonia, in the Pacific Ocean : with Pondicherry, and a few other stations, in India.

The Channel Islands, which lie off the north-western coast of France, belong to Great Britain, and have been attached to the English crown ever since the date of the Norman conquest. They consist of Jersey, Guernsey, Alderney, Sark, and a few smaller islets. The chief town of Jersey, which is the largest of the number, is *St Helier*.

EXAMINATION QUESTIONS.

1. Name, and point out on the map, the boundaries of France.
2. What proportion does the size of France bear to that of England?
3. What lines of sea-coast does France possess?
4. What mountains form part of the frontier-line of France?
5. Is France generally a level or a hilly country?
6. In what part of France is the district called the Landes? What are its features?
7. Name the four great rivers of France, with the seas into which they flow.
8. What kind of climate has France, compared with that of England?
9. What productions of the vegetable kingdom characterise the south of France?
10. In what parts of France is the vine most extensively grown for the purpose of wine-produce?

11. What branch of manufacture is most characteristic of French industry?
12. In what parts of France are the silk, woollen, linen, and cotton manufactures, chiefly pursued?
13. What other articles enter into the list of French manufacturing produce?
14. What articles are most extensively exported from France?
15. Name the three great ports for the foreign commerce of France, and point them out on the map.
16. Into how many departments is France divided, and from what are their names in many cases derived?
17. Name some of the most important among the former provinces of France.
18. On what rivers are the following places situated—Paris, Rouen, Troyes, Amiens, Orleans, and Nantes?
19. Name the principal sea-ports on the French shores of the Channel.
20. In what parts of France are Cressy, Agincourt, and Poitiers?
21. Where is Lyons, and of what branch of industry is it the seat?
22. Where are Rheims, La Rochelle, Rochefort, Montpellier, Dijon, and St Etienne?
23. On what river is Bordeaux, and for what is it distinguished?
24. On what rivers are Toulouse, Bayonne, Avignon, Besançon, and Strasbourg?
25. Point on the map to Cherbourg, Brest, and Toulon, the three great naval arsenals of France.
26. Where is Marseilles, and for what is it noteworthy?
27. What towns does the island of Corsica contain?
28. Under what form of government is France, and what is the prevailing religion?
29. Enumerate the foreign possessions of France.
30. Where are the Channel Islands? To what country do they belong? Name the different islands.

BELGIUM.

SITUATION, BOUNDARIES, AND EXTENT.—Belgium is a small country in the west of Europe. It is bounded on the north by Holland; on the east by Prussia; on the south by France; and on the west by the North Sea, or German Ocean. Its sea-coast is of limited extent. Its area is about 11,300 square miles, which is about one-fifth of the size of England and Wales.

SURFACE.—The greater part of Belgium is level; but in its eastern division the ground becomes hilly, and includes the wooded region of the Ardennes.

RIVERS.—The Meuse and the Scheldt are the two chief rivers of Belgium, but both of them pass thence into Holland, and have their lower courses in that country. These rivers have numerous tributaries, as the Senne and the Dender, which join the Scheldt, and the Sambre, which unites its waters to the Meuse.

CLIMATE AND PRODUCTIONS.—The climate resembles in most respects that of England. Belgium is rich in mineral prod-

containing extensive coal-fields and abundant deposits of iron-ore, which are very largely worked. Belgium supplies more coal than any other country in Europe, excepting Britain.

POPULATION AND INDUSTRY.—Comparatively to its size, Belgium is the most populous country in Europe—probably the most populous in the world. It has upwards of four and-a-half millions of inhabitants—equivalent to more than 400 persons to the square mile. The people of Belgium are properly called Flemings, and the native dialect of the lower orders is the Flemish tongue: but the French language is uniformly spoken by the upper classes of society.

The Belgian population are highly distinguished for their industry. Nearly every part of the country is well cultivated. Corn, flax, hemp, madder, and tobacco, are grown. The manufacture of woollen, linen, lace, cotton, and silk goods, is largely carried on. The fine lace of Belgium (produced at Brussels, Mechlin, Antwerp, and elsewhere,) is unrivalled in quality. Iron-works are numerous in the eastern part of the kingdom, towards the banks of the Meuse. Railways extend through every part of Belgium.

DIVISIONS AND TOWNS.—Belgium is divided into nine provinces, the names of which, with their chief towns, are as follow:—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
WEST FLANDERS....	Bruges, Ostend.	LIMBURG	St Tron.
EAST FLANDERS....	Ghent, St Nicholas	LIEGE	Liege, Verviers.
HAINAUT	Tournay, Mons.	NAMUR	Namur.
SOUTH BRABANT....	Brussels, Louvain.	LUXEMBURG	Arion.
ANTWERP	Antwerp, Mechlin.		

BRUSSELS is the capital of Belgium. It stands on the river Senne, in the centre of the kingdom, and is a well-built and attractive city. Among many interesting places in its neighbourhood, the most noteworthy is the battle-field of Waterloo, ten miles to the southward.

Antwerp, on the river Scheldt, is the principal port of Belgium, and the chief emporium of its foreign trade. *Mechlin*, situated nearly mid-way between Brussels and Antwerp, is noted for its lace manufactures, and is the centre of the Belgian railway system. *Ghent*, an ancient city on the Scheldt, is the principal seat of the cotton manufacture. *Bruges*, further to the westward, has both manufactures and trade. But all of these cities were more populous at a former period—during

the 13th and 14th centuries—than they are at the present day. *Ostend*, on the coast of the North Sea, is a port of some note.

Mons (the chief town of Hainault) and *Namur*, at the junction of the rivers Sambre and Meuse, are within the coal-district of Belgium. *Liege*, in the eastern part of the kingdom, is a flourishing manufacturing city, situated on the Meuse, in the midst of coal-fields and iron-works.

Belgium formed part of the region known in former ages as the Low Countries, and was the frequent theatre of war. The destinies of rival nations have often been decided on its plains. The sites of numerous battle-fields are hence found within its limits—among them, Steinkirk, Landen, Ramillies, Oudenarde, Fontenoy, Jemappes, Quatre-bras, Ligny, and Waterloo.

GOVERNMENT.—Belgium is a constitutional monarchy, under a king. Prior to the revolution of 1830, it was attached to the neighbouring kingdom of the Netherlands. But the Belgian population then asserted their independence, and Belgium was formed into a distinct kingdom. The people resemble the French in many respects, and the French language is generally spoken. The Roman Catholic religion generally prevails.

HOLLAND, OR THE NETHERLANDS.

SITUATION, BOUNDARIES, AND EXTENT.—Holland, a small country of western Europe, borders on the North Sea, which forms its boundary on the west and north. On the east it is bounded by Germany, and on the south by Belgium. Its area is 13,600 square miles, which is less than a fourth part that of England and Wales.

COASTS.—Holland has an extensive and varied line of sea-coast. It includes the large gulf called the Zuyder Zee. A smaller inlet, called the Dollart, is on the north-east border of the kingdom. The northern part of the coast is fronted by a long chain of islands, the largest of them called the Texel. The south-west provinces, Zeeland and South Holland, consist almost entirely of islands, formed by the channels of the various rivers.

SURFACE.—Holland is a flat country, and large parts of it are naturally marshy. Along the coasts, the land is in some places even lower than the waters of the adjoining sea, and it is only by means of mounds (or *dykes*, as they are called), that it is preserved from inundation. A large portion of the country, indeed, has been actually gained from the sea by the persevering industry of the Dutch people. Many of the shallow lakes, or *meers*, have been drained of their waters, and converted into rich pasture-grounds.

RIVERS.—Holland abounds in inland waters. The Rhine, the Meuse, and the Scheldt, are the principal rivers, and the two former of these are connected, towards their mouths, by numerous channels—both natural and artificial. There are many smaller streams—the Yssel, Vecht, and others; and the towns are traversed by numerous canals. So that the whole country exhibits a network of water-courses. It is, however, only the lower portions of the three great rivers named above that are within the Netherlands: their middle and upper courses belong to other lands.

CLIMATE.—Holland is rather colder than England, and the winters are of much greater severity. The air is generally moist, especially in the neighbourhood of the coast.

POPULATION AND INDUSTRY.—Holland has upwards of three and-a-half millions of inhabitants. The Dutch (as the people of Holland are called) are distinguished for their industry, frugality, and cleanliness, and also by their devotion to maritime pursuits. They are among the best farmers, and the most successful traders, in the world.

In Holland, great part of the land is devoted to grazing. Vast numbers of cattle are reared, and the produce of the farm and dairy—cheese, butter, &c.—is of the finest description. Extensive fisheries, in the North Sea and elsewhere, were formerly carried on by the Dutch; but these, though still considerable, are less important now than they once were.

The possession of the mouths of several great rivers enables the people of Holland to command a large share in the transit of commodities to and from the countries of middle Europe. The Dutch have for centuries past been the masters of a great carrying trade. In the 16th and 17th centuries, they were, in this respect, the carriers of the world. Though now less in amount than at a former time, the shipping and foreign commerce of the Dutch nation are still very large.

PROVINCES AND TOWNS.—The kingdom of the Netherlands includes ten provinces, besides portions of Limburg and Luxemburg. The last is properly a part of Germany, but is attached to the Dutch crown. Their names, with the chief towns in each, are:—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
NORTH HOLLAND...	Amsterdam, Haarlem, Horn, Alkmaar.	UTRECHT.....	Utrecht.
SOUTH HOLLAND ...	Rotterdam, The Hague, Leyden.	GUELDERLAND.....	Nimeguen, Zutphen.
ZEELAND	Middleburg, Flushing.	OVERYSSEL	Zwoll.
NORTH BRABANT...	Hertogensbosch, Breda.	DRENTHE	Meppel.
		FRIESLAND	Leeuwarden.
		GRONINGEN.....	Groningen.
		LIMBURG	Maestricht.
		LUXEMBURG.....	Luxemburg.

AMSTERDAM is the largest city of the Netherlands, and the great seat of its foreign trade. It stands at the entrance of the river Amstel into an estuary of the Zuyder Zee, which forms a safe and extensive harbour. *Haarlem* is to the west, *Leyden* and the Hague to the south-west, of Amsterdam. *Leyden* has a university of great repute, and is celebrated in history for the siege it underwent in the latter part of the sixteenth century (1573-74). *The Hague* is a large and well-built city, the seat of government, and political capital of the kingdom. *Rotterdam*, on the river Meuse (the channel of which forms the principal entrance to the Rhine), is the second city of the Netherlands in size and population.

Utrecht, Nimeguen, Breda, Hertogensbosch, and many other of the cities of Holland, are important seats of trade. The Dutch towns in general have many features in common. They are clean and well-built, with canals running through the principal streets, bordered by rows of trees on either hand. Canals serve in Holland many of the purposes of roads in other countries.

GOVERNMENT, &c.—The kingdom of the Netherlands is an hereditary monarchy, under constitutional forms. The Protestant religion is almost uniformly followed. Jews are numerous in the large towns, especially in Amsterdam.

COLONIES.—The chief foreign possessions of Holland are in the East Indies, where the Dutch are masters of Java, with parts of Sumatra, Borneo, and Celebes, besides many of the smaller islands of that region. In the New World, part of Guiana, on the South American mainland, and some of the

smaller islands of the West Indies, belong to the Dutch. In Africa, some ports upon the coast of Guinea.

QUESTIONS ON BELGIUM AND HOLLAND.

1. How is Belgium bounded?
 2. What kind of country is Belgium, as to its surface?
 3. Name the chief rivers of Belgium. Into what sea do they flow?
 4. In what kind of mineral produce is Belgium rich?
 5. What are the people of Belgium properly called? What language is generally spoken?
 6. What articles of industrial produce does Belgium supply?
 7. Into how many provinces is Belgium divided? Name them.
 8. Point on the map to the capital of Belgium. On what river does it stand?
 9. Name the chief sea-port of Belgium. On what river does it stand?
 10. For what are Mechlin, Ghent, Bruges, and Liege respectively noted?
 11. What battle-fields are included within the limits of Belgium?
 12. How is Holland, or the kingdom of the Netherlands, bounded?
 13. What arms of the sea occur on the coast of Holland? Point them out upon the map.
 14. What kind of country is Holland, as to its surface?
 15. Name the three principal rivers of Holland. Into what sea do they flow?
 16. What kind of climate has Holland?
 17. By what qualities are the Dutch people distinguished?
 18. Of what do the productions of Dutch industry chiefly consist, and what kind of trade do the Dutch carry on?
 19. Name the provinces into which Holland is divided?
 20. How is Amsterdam situated, and for what is it distinguished?
 21. Name some of the other principal towns of Holland. Which is the seat of government?
 22. By what characteristics (as to appearance) are the towns of Holland generally distinguished?
 23. Under what kind of government are Belgium and Holland, respectively? What is the prevailing religion in each?
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SWITZERLAND.

SITUATION, BOUNDARIES, AND EXTENT.—Switzerland is a small country of middle Europe, situated principally to the north of the Alps. Its boundaries are—on the north and east, Germany; on the south, Italy; on the west, France. The course of the river Rhine marks the chief part of the frontier on the side of Germany; the highest portion of the Alpine system divides Switzerland from Italy, and the chains of Mount Jura form part of the boundary on the side of France. Switzerland is

entirely an inland country. Its area is about 15,000 square miles—little more than a fourth part of the size of England and Wales.

NATURAL FEATURES.—Switzerland is a mountainous country. Two-thirds of its surface consist of high mountains and intervening valleys: the other third is an elevated plain. The mountain-land embraces the southern and eastern divisions of the country: the northern and western portions belong to the plain, or valley, which stretches across the country in the direction of north-east and south-west, between the Lakes of Constance and Geneva.

Mont Blanc, the highest summit of the Alps, is on the border-line of Piedmont and Savoy, and beyond the limits of Switzerland. But many of the principal Alpine summits are either within Switzerland, or on its borders, and the most extensive of the glaciers are within its limits.

Among the Swiss Alps are the following :—

<i>Name.</i>	<i>Height.</i>	<i>Name.</i>	<i>Height.</i>
Monte Rosa.....	15,152 feet.	Mount Pilate.....	7,116 feet.
Mont Cervin, or Matter- horn.....	14,937 "	The Rhod.....	5,805 "
Mount St Gothard.....	10,595 "	Pass of Great St Bernard.....	8,200 "
Finster-aar-horn.....	14,100 "	Pass of the Simplon.....	6,578 "
Jungfrau.....	13,718 "	Pass of the Splügen.....	6,814 "
Titlis.....	11,414 "	Pass of the Grimsel.....	8,400 "
		Gemmi Pass.....	7,160 "

RIVERS.—The Rhine and the Rhone are the two most important of the Swiss rivers, and, with their numerous tributary streams, water by far the greater part of the country. Both rivers have their origin in the glaciers which lie around Mount St Gothard. The Rhine flows east and north, and enters the Lake of Constance: the Rhone has a westerly course, into the Lake of Geneva. The river Aar is a considerable affluent of the Rhine, and is joined by the Reuss, the Limmat, and other streams.

The river Inn, which waters the easternmost part of Switzerland, is a tributary of the Danube. The river Tessin (or Ticino), which waters the only one of the Swiss cantons that lies south of the Alps, is an affluent of the Po.

Numerous waterfalls occur in Switzerland, and are among the most attractive features of its scenery. The highest of them is the Staubbach, in which the mountain-torrent (an affluent of the Lake of Brienz, in the southern part of the

canton of Berne,) falls 800 feet. The falls of the Rhine, below Schaffhausen, are much celebrated.

LAKES.—Switzerland abounds in lakes. The principal are : —the lakes of Geneva, Constance, Neufchatel, Lucerne, Zurich, Thun, Brienz, and Wallenstadt—all lying to the north of the Alps ; with Maggiore and Lugano, to the south of the mountains.

CLIMATE AND PRODUCTIONS.—The elevation of the country renders the climate of Switzerland cold, on the whole, though in particular localities (and especially in the narrow mountain-valleys) considerable heat is experienced. The shores of the Lake of Geneva are specially distinguished for their warm and equable temperature. In all the higher regions, however, the winters are long and severe.

The produce of the soil is varied. The vine flourishes in the lower valleys and plains. Wheat and other grains are also grown. But Switzerland is rather a pastoral than an agricultural country. Timber is abundant upon the mountain-sides.

POPULATION AND INDUSTRY.—Switzerland has 2,400,000 inhabitants, which is a large population for so mountainous a country. The Swiss (as the people are called) are not so much a distinct nation as an offshoot from the population of the two neighbouring countries—Germany and France. There is no Swiss language. In the western cantons, the people speak French : in the east, the German language is the common tongue. In one of the Swiss cantons—that of Tessin, to the south of the Alps—the people are of Italian origin, and speak the language of Italy.

The Swiss are a frugal and an industrious race. Within the mountain-region, the people are chiefly shepherds and herdsmen. Their cows, sheep, and goats constitute their wealth, and furnish their principal occupation. In summer, the cattle are pastured on the mountain-sides : in winter, they descend to the valleys.

In the more level parts of the country (that is, in the north and west), manufactures are extensively pursued. Silk and cotton goods are made : so also are watches, musical boxes, and various articles of jewellery. A vast number of watches, the produce of Swiss industry, are annually exported to other countries. Geneva is a great seat of this manufacture.

DIVISIONS AND TOWNS.—Switzerland comprehends twenty-

two Cantons, the names of which, with the principal towns in each, are as follow :—

<i>Cantons.</i>	<i>Towns.</i>
BERNE	Berne.
SOLEURE	Soleure.
BASEL	Basle.
AARGAU	Aargau.
ZURICH	Zurich.
SCHAFFHAUSEN	Schaffhausen.
THURGAU	Frauenfeld.
APPENZELL	Appenzell.
ST GALL	St Gall.
GLARUS	Glarus.
SCHWYZ	Schwyz.
ZUG	Zug.

<i>Cantons.</i>	<i>Towns.</i>
LUCERNE	Lucerne.
UNTERWALDEN	Stanz, Sarnen.
URI	Altorf.
FRIBOURG	Fribourg.
NEUCHÂTEL	Neuchâtel.
VAUD	Lausanne.
GENÈVE	Geneva.
VALAIS	Sion.
GRISONS	Chur, or Coire
TESSIN	Bellinzona, Lugano.

The city of *Berne*, which is on the banks of the Aar, ranks as the capital of the Swiss Confederation. Next in importance to it are Geneva, Zurich, and Basle, the first-named of which has a greater population than any other town in Switzerland. *Geneva* lies at the foot of the beautiful lake called by its name, where the Rhone issues from its waters. Besides its manufacture of gold watches, Geneva is highly distinguished as a seat of learning, and was the early stronghold of the Reformed Church. *Zurich*, also distinguished for its literary culture, is at the northern extremity of the Lake of Zurich, at the outlet of the river Limmat, which afterwards joins the Aar. *Basle* (or Basel) is in the north-west corner of Switzerland, at the great bend of the Rhine, and is the seat of considerable trade.

The Lake of Lucerne, in the heart of the mountain-country, is enclosed by the cantons of Schwyz, Uri, Unterwalden, and Lucerne—known as the “forest cantons,” the cradle of Swiss independence, and the centre of Roman Catholic Switzerland. The well-known summit of the Rigi rises above the north-eastern shores of the lake.

GOVERNMENT, &c.—Switzerland forms a federal republic. Each canton has an internal administration of its own, while the public affairs of the whole are regulated by a Diet (consisting of deputies from the different cantons), which has its sittings at Berne.

In religion, Switzerland is divided between the Protestant and the Romish Churches. Rather more than half the population belong to the former, which embraces chiefly the manufacturing cantons of the north and west.

QUESTIONS ON SWITZERLAND.

1. Name the boundaries of Switzerland. What natural features do they embrace?
 2. What kind of surface does Switzerland exhibit?
 3. Name some of the principal Alpine summits that are within, or on the borders of, Switzerland. Which is highest of the number?
 4. Name some of the mountain-passes that belong to the Swiss Alps.
 5. Mention the principal rivers of Switzerland, tracing their courses on the map.
 6. Name the principal lakes.
 7. What is the highest of the Swiss waterfalls called? In what canton is it?
 8. What productions of the soil belong to Switzerland?
 9. What languages are commonly spoken by the Swiss people?
 10. What industrial pursuits distinguish the Swiss nation?
 11. How many cantons does Switzerland embrace? Which among them contains the seat of the general government?
 12. In what parts of the country are the cities of Geneva, Zurich, and Basle? For what are the two former distinguished?
 13. Under what form of government is Switzerland?
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GERMANY.

SITUATION, BOUNDARIES, AND EXTENT.—Germany is a large country of middle Europe, reaching across the continent from the Baltic Sea to the Adriatic, and from the North Sea to the head of the river Vistula. It is bounded on the north by Denmark and the Baltic Sea; on the east by Poland and Hungary; on the south by the Adriatic Sea, Italy, and Switzerland; on the west by France, Belgium, Holland, and the North Sea. Its size is upwards of 244,000 square miles, equal to more than twice the united area of Great Britain and Ireland.

DIVISIONS.—Germany is politically divided into 35 different States, which, though united for common purposes into a body called the Germanic Confederation, have yet each a government of their own. Of these States, the first in order of importance is the Empire of Austria, and the second is the kingdom of Prussia. Austria and Prussia embrace between them more than half of the entire area of Germany. Some of the other German States are of very small size—so small as to be undistinguishable upon the general map of Europe. It is best to describe first the two greater States—Austria and Prussia—and next the smaller divisions of this extensive country.

1.—THE EMPIRE OF AUSTRIA.

SITUATION, &c.—The Austrian Empire embraces a large portion of middle Europe. Besides portions of Germany, it includes other extensive countries, situated beyond the German limits—as Hungary, Galicia, and part of Italy. As a whole, the Austrian Empire is bounded on the north by Saxony, Prussia, and Poland; on the east by Russia and Turkey; on the south by Turkey, the Adriatic Sea, and the States of the Church; on the west by Sardinia, Switzerland, and Bavaria. Its area is 258,000 square miles. The only sea-coast which belongs to Austria is at the head of the Adriatic, and upon the eastern side of that sea.

MOUNTAINS AND PLAINS.—The Austrian Empire includes the eastern portions of the Alps, and the whole of the Carpathian mountain-system. The Alps belong to the German provinces of the empire: the Carpathians to the Hungarian countries. The Carpathian Mountains are not so lofty as the Alps; they form a well-defined boundary to the north and east of Hungary, dividing that country from the province of Galicia. Between the Carpathians and the eastern spurs of the Alps is the large plain of Hungary. The less extensive plain of Bohemia is in the north-west part of the empire.

RIVERS AND LAKES.—The Danube is the great river of Austria. It flows through the heart of the empire, from west to east, and, with its numerous tributaries, waters more than two-thirds of its whole extent. Of these tributaries, the Inn, the Drave, the Save, and the Theiss, are the most considerable. The Elbe and the Dniester have their upper portions within Austria—the former in the province of Bohemia, the latter in Galicia. The Po, in Italy, forms part of the southern boundary of the empire.

Two large lakes occur in Hungary—the Neusiedler See, and the Platten See (or Lake of Balaton). Neither of them has any outlet for its waters, which, in the case of each, are salt.

CLIMATE AND PRODUCTIONS.—So extensive and varied a range of country naturally exhibits many differences of climate, soil, and vegetation. The warmest portions of the empire are those to the south of the Alps, towards the coasts of the Adriatic. The plain of Hungary is distinguished by extremes of heat and cold, at the opposite seasons of the year. Upon the whole, the climate of most parts of Austria is dry, healthy,

and temperate. The vine thrives in Hungary, and throughout the southern provinces in general. The fig, olive, and mulberry, are found on the shores of the Adriatic.

Austria is rich in mineral produce. Both gold and silver are worked in Hungary and Transylvania. Within the German provinces there are rich mines of lead and iron, besides the quicksilver mine of Idria (in the province of Carniola, above the head of the Adriatic).

POPULATION AND INDUSTRY.—The Austrian Empire has nearly forty millions of inhabitants—a greater population than any other country in Europe, excepting Russia. More than thirteen millions of the number inhabit the German provinces of the Empire. Five and-a-half millions are Poles, and a like number belong to the Italian province. The remainder includes the population of Hungary and the adjacent territories, known under the general name of the Hungarian countries.

The industrial produce of the empire is considerable. Agriculture occupies by much the larger proportion of the people, especially in Hungary and Galicia, which are the principal corn-growing provinces. Manufactures are most pursued in the German provinces, where the making of linen, woollen, and other fabrics, is carried on. Bohemia is much celebrated for its glass-works. Still, Austria is not, on the whole, a manufacturing country.

The foreign commerce of Austria is checked by its limited extent of sea-coast, and by the mountain-chains which have to be crossed in order to reach this coast from the interior. The ports of Trieste, Fiume, and Venice, are the chief seats of Austrian maritime trade—Trieste for the German provinces, Fiume for the Hungarian, and Venice for the Italian provinces. The Danube is the great highway of internal trade.

DIVISIONS AND TOWNS.—The Austrian Empire includes, in all, twenty great provinces. Ten of the number are within Germany; these, with the principal towns in each, are as follow :—

AUSTRIA PROPER	Vienna, Linz.
SALZBURG	Salzburg.
STYRIA	Graz.
CARINTHIA	Klagenfurt.
CARNIOLA	Laybach.

THE LITTORAL, OR	
COAST REGION	Trieste.
TYROL	Innsbruck.
BOHEMIA	Prague.
MORAVIA	Brunn, Olmutz.
SILESIA	Troppau.

VIENNA, the capital of the Austrian Empire, stands on the south bank of the Danube. It is among the largest of Euro-

pean capitals, and is a great centre of trade. *Linz*, in Upper Austria, is also on the Danube. *Gratz*, in Styria, one of the most considerable provincial towns in the empire, is on the river Mur, an affluent of the Drave. *Trieste*, situated at the head of the Adriatic, is the principal sea-port of Austria.

Prague, the capital of Bohemia, comes next to Vienna in size and population, and is a place of much note in history. Prague stands on the river Moldau, which joins the Elbe. *Brunn*, in Moravia, is an important manufacturing town. Not far distant from it is Austerlitz, the scene of Napoleon's victory over the Austrians, in 1805.

The following countries are beyond the limits of Germany. They include more than two-thirds of the total extent of the Austrian Empire :—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
HUNGARY	Pesth, Buda, Presburg.	CROATIA	Agram, Fiume.
TRANSYLVANIA...	Kronstadt, Klausenburg.	DALMATIA	Zara, Ragusa.
SLAVONIA	Peterwardsein.	GALICIA	Lemberg, Cracow.
		LOMBARDY AND	
		VENICE	Milan, Venice.

The first five of the above are comprehended under the general name of the Hungarian countries. They include more than half the entire extent of the empire.

Pesth and *Buda*, which together form the chief city of Hungary, stand on the opposite banks of the Danube. *Pesth* (on the east bank) is of the larger size, but *Buda* is the more ancient. They form together a large city, and *Pesth* is a great seat of trade. *Presburg*, higher up the river, was the ancient capital of Hungary, during its period of national independence.

Fiume is the chief sea-port of the Hungarian countries. It lies at the head of an arm of the Adriatic, to the eastward of the Gulf of Trieste. *Zara*, the chief place in Dalmatia, is on the east coast of the Adriatic, and is a thriving port.

GALICIA lies to the east and north of the Carpathian Mountains, and was formerly a portion of Poland. *Lemberg* is a

large city, with considerable trade. *Cracow*, on the Vistula, was formerly the ecclesiastical capital of Poland.

GOVERNMENT, &c.—The empire of Austria is an hereditary monarchy, with institutions which are strictly despotic. A very large standing army is maintained, and is rendered necessary by the difficulty of keeping in subjection so many provinces, the native population of which are thoroughly hostile to the ruling power. Austria, as a whole, has no nationality. The ruling power in the empire is German; but two-thirds of the subjects of Austria are of races differing in language, habits, and ideas, from the Germans, whose rule they reluctantly obey. This division of races is a source of political weakness to the empire.

The Roman Catholic religion is followed by three-fourths of the population. Protestants are most numerous in Hungary and Transylvania. Many of the people of the Hungarian countries, however, are members of the Greek Church.

QUESTIONS ON THE EMPIRE OF AUSTRIA.

1. By what countries is the Austrian Empire bounded?
2. What countries beyond the limits of Germany does the Austrian Empire embrace?
3. What two mountain-systems are (one of them partly, the other wholly,) within the limits of Austria? Which of the two is the loftier?
4. What plains are within the limits of the empire?
5. Name the chief rivers of the Austrian Empire, and trace their courses on the map.
6. Which portions of the Austrian Empire are distinguished by the greater warmth of their climate? Name some of the fruits that belong to these provinces.
7. What descriptions of mineral wealth does the empire contain, and in which of its provinces?
8. What races of people are included among the subjects of Austria?
9. What branches of industry are most characteristic of the people?
10. Name the three chief ports for the foreign commerce of the empire, and point to their situations on the map.
11. How many of the provinces of Austria fall within the limits of Germany? Name them.
12. What portions of the empire come under the general name of the Hungarian countries?
13. Which of the Austrian provinces was formerly a part of Poland, and what is its chief city?
14. On what rivers are the cities of Vienna, Gratz, Prague, Pesth, and Cracow, respectively situated?
15. What is the form of government, and what the prevailing religion, in the Austrian Empire?

2.—PRUSSIA.

SITUATION, &c.—Prussia embraces a large part of Northern Germany, together with two provinces which are beyond the limits of Germany. It is a country of very irregular shape, and consists of two detached portions, which are separated by intervening parts of some of the smaller German States.

Prussia is bounded on the north by the Baltic Sea and the kingdom of Hanover; on the east by Russian Poland; on the south by the Austrian Empire, the smaller German States, and France; on the west by Belgium and Holland. Its area is little short of 108,000 square miles, or rather more than double the size of England.

The coast-line of Prussia is limited to the Baltic. But at one point on the shore of the North Sea, upon the Gulf called the *Iahde*, Prussia has within a recent period acquired the right of constructing a military port.

NATURAL FEATURES.—Prussia is chiefly level, and the larger part of its extent belongs to the great plain of northern Germany. It has, however, some hilly districts, as towards the southern frontier of Silesia. The Harz Mountains, on the border of Hanover, are partly within its limits. The Rhine Province (as that part of Prussia which borders on the Rhine is called) has a very varied surface, and exhibits much beautiful scenery.

RIVERS.—Five great rivers belong, in part, to the Prussian territory—the Rhine, Elbe, Oder, Vistula, and Niemen. The Oder is almost entirely Prussian: the other four are only so in portions of their courses.

CLIMATE AND PRODUCTIONS.—The climate of Prussia resembles that of the similar latitudes of England; but it is somewhat colder, at least in the eastern parts of the kingdom, towards the Baltic, where the winters are severe. The forests are extensive, and give shelter to numerous wild animals, as the wolf, wild boar, and various deer. Minerals are not generally abundant; but coal, iron, and other metals, occur in the western division of the kingdom. Amber is found on the shores of the Baltic.

POPULATION AND INDUSTRY.—Prussia has 17,200,000 inhabitants, more than three-fourths of them German. The most thickly-populated portions of the kingdom are Silesia and the Rhine Province, in which manufacturing industry is most

flourishing. Linen goods are extensively made in Silesia; metal works and cotton manufactures are largely carried on in the western division of the kingdom. Woollen cloths are also made on an extensive scale, and the silk manufacture flourishes.

But Prussia is more agricultural than manufacturing, on the whole. The various grains, especially rye (which forms the chief food of the people), are very largely raised; as also is flax, for the supply of the linen manufacture. Railways now extend through every part of the kingdom, and promote largely its internal trade.

PROVINCES AND TOWNS.—Prussia includes eight provinces, six of them within Germany. These six are—Brandenburg, Pomerania, Silesia, Prussian Saxony, Westphalia, and the Rhine Province. The two last-named form the westerly and detached portion of the Prussian territory.

The two remaining provinces—beyond the limits of Germany—are Posen and Prussia Proper. Posen was formerly a part of Poland. Prussia Proper, the nucleus of the monarchy, is the most easterly province, and borders on the Baltic Sea.

The principal towns in each are:—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
BRANDENBURG.....	Berlin, Potsdam, Frankfort-on-the- Oder.	RHINE PROVINCE..	Cologne, Aachen, Elberfeld, Crefeld, Treves, Coblenz.
POMERANIA.....	Stettin, Stralsund.	POSEN.....	Posen.
SILESIA.....	Breslau.	PRUSSIA PROPER..	Königsberg, Danzig, Memel.
SAXONY.....	Magdeburg, Halle.		
WESTPHALIA.....	Munster, Minden.		

BERLIN, the capital of Prussia, is on the river Spree, which joins the Havel (an affluent of the Elbe). It is a large and flourishing city, noted for its iron, porcelain, and other manufactures, and is in external appearance one of the finest of European capitals. *Potsdam*, to the south-west of Berlin, forms the head-quarters of the Prussian army.

Breslau, in Silesia (on the river Oder), is the second city in Prussia in point of population, and is the centre of an extensive trade. *Magdeburg*, the chief city of Prussian Saxony, is on the river Elbe. *Stettin*, near the mouth of the Oder, is one of the chief seaports of the kingdom.

There are a greater number of large towns in the Rhine Province than in any other part of the kingdom. *Cologne*, the

most considerable, is on the left bank of the Rhine: its cathedral, and its well-known "Eau de Cologne," give it celebrity. *Elberfeld* (with the adjoining town of Barmen) is the chief seat of the cotton manufactures of Prussia. *Aachen* (or Aix-la-Chapelle) is a populous manufacturing town, to the west of Cologne, near the Belgian frontier. *Treves* is on the banks of the Moselle; *Coblenz* at the junction of that river with the Rhine.

Danzig (or Dantzic), in the eastern part of the kingdom, is the chief seat of the foreign commerce of Prussia. It lies near the Baltic coast, at the mouth of the Vistula. *Königsberg*, the capital of Prussia Proper, is further to the eastward. *Memel* is an important seaport, at the entrance of an estuary into which the river Niemen flows.

GOVERNMENT, &c.—The kingdom of Prussia is an hereditary monarchy, in most respects under military forms, with nearly absolute power on the part of the sovereign. The Protestant religion is followed by the majority of the nation, but there are numerous members of the Romish Church, and also (in the towns) a great many Jews. Education is in a highly advanced state among the Prussian people.

QUESTIONS ON PRUSSIA.

1. How is Prussia bounded?
2. What kind of country is Prussia, as to features of surface?
3. What rivers flow through Prussia? Point them out on the map, and name the seas into which they fall.
4. What productions of the mineral kingdom occur in Prussia?
5. What branches of manufacturing industry does Prussia possess? Which of the provinces are most distinguished in this respect?
6. What productions does the agricultural industry of Prussia embrace? What grain is most largely consumed as food?
7. Name the six provinces of Prussia that are within Germany.
8. Which two of the provinces are beyond the limits of Germany? Name them, and point out their position on the map.
9. In what province is the capital of the kingdom situated, and on what river does it lie?
10. In which of the provinces are Breslau, Stettin, Magdeburg, Aachen, Munster, and Danzig?
11. On what rivers are Cologne, Treves, Breslau, Stettin, and Magdeburg?
12. Which of the provinces of Prussia contains the greatest number of large towns? Name some of them.
13. For what are Elberfeld, Cologne, and Danzig respectively distinguished?
14. At the junction of what two rivers does Coblenz stand?

3.—THE SMALLER STATES OF GERMANY.

The smaller German States—thirty-three in number—comprehend various Kingdoms, Grand-Duchies, Duchies, and Principalities, with one Electorate, and four Free Cities (or Municipalities). The largest among them is the kingdom of Bavaria, which is about the size of Scotland: the smallest is the city of Frankfort-on-the-Main, which, with a small surrounding district, embraces thirty-eight square miles.

NATURAL FEATURES.—The southern and middle portions of Germany are hilly: its northern division is level. Bavaria, Wurtemberg, and Baden—all in the southwardly division of Germany—exhibit a highly-diversified surface. Bavaria forms an upland plain (or table-land), penetrated in the south by outlying branches of the Alps. Baden includes the chain of the Black Forest, or Schwarz-Wald.

The kingdom of Saxony, and the various smaller Saxon states (Saxe-Weimar, &c.), with Hessen-Cassel and Hessen-Darmstadt, within the middle region of Germany, also exhibit great variety of surface, hilly and wooded tracts alternating with fertile valley and cultivated plain.

Hanover, Mecklenburg, and Oldenburg, in the north of Germany, include great part of the plain which stretches along the Baltic coast. This plain consists in many parts of sandy and heathy tracts. In the south, however, Hanover includes the greater part of the mining group of the Harz Mountains, on the Prussian frontier.

RIVERS.—Germany abounds in inland waters. The chief rivers are the Rhine and Danube, with their numerous tributaries. Besides these, are the Elbe, Weser, and Ems. The Oder is within the Prussian territory.

CLIMATE AND PRODUCTIONS.—The climate of every part of Germany is temperate and healthy, but in the extreme north (towards the Baltic coast), the winters are severe, and the air is often obscured by mists. The vine is a characteristic product of the soil in the south and west of Germany, especially within the valley of the Rhine. The mineral produce of Germany is varied and abundant—especially so in Saxony and the district of the Harz Mountains; together with Illyria, the Rhine Province, and other mining districts of Austrian and Prussian Germany. The finest stones for lithographic printing produce of Bavaria.

POPULATION AND INDUSTRY.—Germany contains, in all, 43,000,000 of inhabitants. Nearly 26,000,000 of the number, however, are subjects of Austria and Prussia. The smaller German States have together a population of about 17,000,000. Bavaria, the largest among them, has 4,500,000 of subjects; Saxony has upwards of 2,000,000; Hanover, more than 1,750,000.

The industry of Germany is very varied. As a whole, Germany is rather agricultural than manufacturing, and the majority of the people are dependent on the soil for subsistence. But the manufactures of Germany are considerable in amount, and are rapidly increasing. Saxony is distinguished for its woollen cloths, and also for its fine porcelain. The commercial activity of the German States is very great.

DIVISIONS AND TOWNS.—Four of the smaller States of Germany have the rank of Kingdoms. Their names, with the chief towns of each, are as follow :—

<i>Kingdoms.</i>	<i>Towns.</i>	<i>Kingdoms.</i>	<i>Towns.</i>
BAVARIA.....	Munich, Nuremberg, Augsburg, Ratisbon, Bamberg.	SAXONY	Dresden, Leipzig, Meissen.
WURTEMBERG	Stuttgart, Ulm.	HANOVER.....	Hanover, Gottingen, Embsen.

MUNICH, the capital of Bavaria, is on the bank of the river Isar, one of the affluents of the Danube. Munich is a fine city, celebrated for its magnificent collections of painting and sculpture. *Augsburg* is on the river Lech, to the north-west of the capital. *Nuremberg* lies in the plain to the north of the Danube, on a small affluent of the Main. *Ratisbon* is on the Danube.

Wurtemberg lies immediately west of Bavaria. Its capital, **STUTTGAERT**, is near the left bank of the river Neckar, one of the chief affluents of the Rhine. *Ulm* is an ancient city on the Danube.

DRESDEN, the capital of Saxony, is on the river Elbe, and is one of the finest of continental cities, with galleries that are rich in works of art. *Meissen*, a few miles below Dresden, is celebrated for its porcelain works: *Leipzig* for its university and its book-trade, as well as for the triumph of German independence in the great victory gained by the united armies of Prussia and Austria over the French, in 1813.

The city of **HANOVER** is within the plain of northern Germany, on a small river called the Leine, an affluent of the Weser. *Gottingen* is celebrated for its university.

The following seven of the German States are Grand-Duchies :—

States.	Towns.	States.	Towns.
BADEN	Carlsruhe, Mannheim, Heidelberg.	HESSEN-DARMSTADT.....	Darmstadt, Mentz.
MECKLENBURG-SCHWERIN.....	Schwerin.	OLDENBURG	Oldenburg.
MECKLENBURG-STRELITZ.....	Neu-Strelitz.	LUXEMBURG.....	Luxemburg.
		SAXE-WEIMAR.....	Weimar, Jend.

The Grand-Duchy of BADEN stretches along the right bank of the Rhine. Its capital, *Carlsruhe*, is a short distance to the eastward of that river. *Mannheim* is at the junction of the Neckar with the Rhine. *Heidelberg* is on the Neckar.

MECKLENBURG is in the north of Germany, and borders on the Baltic Sea, to the eastward of the river Elbe. Of the two portions into which it is divided, Mecklenburg-Schwerin is by much the larger.

HESSEN-DARMSTADT is a territory of western Germany, immediately to the northward of Baden. The city of *Darmstadt* is some distance to the east of the Rhine. *Mentz* (or *Mayence*) is an ancient city on the west bank of the Rhine, opposite the junction of the river Main.

OLDENBURG is in the north of Germany, and is enclosed by the territory of Hanover, excepting where it borders on the North Sea. The town of *Oldenburg* is on a tributary of the Weser.

LUXEMBURG is in the west of Germany, upon the borders of Prussia and Belgium. It is politically attached to the kingdom of the Netherlands. The town of *Luxemburg*, situated on a tributary of the Moselle, is a strong fortress.

The Grand-Duchy of SAXE-WEIMAR is the most considerable of the smaller Saxon States. It lies in the very centre of Germany, and embraces several small detached portions of territory.

Ten of the States of Germany rank as Duchies. They are the following :—

States.	Chief Towns.	States.	Chief Towns.
HOLSTEIN	Altona.	SAXE-ALTENBURG	Altenburg.
NASSAU.....	Wiesbaden.	LIPPE-DETMOLD.....	Detmold.
BRUNSWICK.....	Brunswick.	LIPPE-SCHAUMBURG.....	Buckeburg.
SAXE-MEININGEN	Meiningen.	ANHALT-DESSAU-KOETHEN.....	Dessau.
SAXE-COBURG-GOTHA.....	Coburg, Gotha.	ANHALT-BERNBURG	Bernburg.

HOLSTEIN, in the extreme north of Germany, is politically attached to the kingdom of Denmark. *Altona*, its chief city, is on the Elbe, immediately below Hamburg.

The Duchy of **NASSAU** is in middle Germany, on the right bank of the Rhine. *Wiesbaden*, its capital, is a short distance to the northward of that river.

The Duchy of **BRUNSWICK** is to the southward of Hanover, and is enclosed between that kingdom and the Prussian territory. The city of *Brunswick* lies on the river Ocker, a small tributary of the Weser.

The three small Saxon States distinguished as **SAXE-MEININGEN**, **SAXE-COBURG-GOTHA**, and **SAXE-ALTENBURG**, are within the hilly region of central Germany, in the same locality as Saxe-Weimar. The towns from which their distinguishing names are derived are of small size.

The two territories of **LIPPE** are in the north-west division of Germany, enclosed between the dominions of Hanover and Prussia.

ANHALT comprises two small adjacent territories of northern Germany, which are entirely surrounded by the Prussian dominions. The town of *Dessau* is on the Elbe, at the junction of the river Mulde. *Bernburg* is on the river Saale, which also joins the Elbe.

One of the German States is an Electorate—its ruler bearing the title of Elector:—

<i>State.</i>	<i>Chief Town.</i>
HESSEN-CASSEL	<i>Cassel.</i>

HESSEN-CASSEL includes a diversified tract of western Germany, adjoining the Prussian dominions on either side. The town of *Cassel* is on the river Fulda, one of the chief affluents of the Weser.

HESSEN-HOMBURG, a small territory of western Germany, is styled a Landgraviate—its sovereign bearing the title of Landgrave. The chief town is *Homburg*, situated a few miles north of Frankfort-on-the-Main.

The six Principalities of Germany are:—

<i>States.</i>	<i>Towns.</i>	<i>States.</i>	<i>Towns.</i>
WALDECK	Arolsen.	SCHWARZBURG-	} Sondershausen.
REUSS-GREITZ	Greitz.	SONDERSHAUSEN	
REUSS-SCHLEITZ ..	Schleitz.	LICHTENSTEIN	
SCHWARZBURG-	} Rudolstadt.		Lichtenstein.
RUDOLSTADT.....			

WALDECK embraces two small portions of territory in the north and west of Germany.

The adjoining principalities of REUSS are within central Germany, between the kingdom of Saxony and the smaller Saxon States.

The territories of SCHWARZBURG are also within central Germany, enclosed between the Prussian dominions and the various small Saxon States.

LICHTENSTEIN, the smallest of the German Principalities, is a little territory adjoining the east border of Switzerland and the Austrian province of Tyrol. It is about one-third of the county of Rutland in size.

The four Free Cities of Germany are Hamburg, Bremen, Lubeck, and Frankfort-on-the-Main.

HAMBURG is a great commercial city, seated on the river Elbe, sixty miles above its mouth. It is the emporium of the foreign commerce of Germany, and carries on an immense trade with all nations.

BREMEN, which is only second to Hamburg as a commercial port, is on the river Weser, forty miles above the mouth of that river.

LUBECK stands on the small river Trave, which enters the Baltic. It has some trade, but less now than at a former period.

FRANKFORT-ON-THE-MAIN is an inland city, in the heart of Germany, seated on the river Main, a few miles above the junction of that stream with the Rhine. Frankfort is a great centre of inland trade, and is the seat of the Germanic Diet.

GOVERNMENT, &c.—The whole of the thirty-five States above described—Austria and Prussia included—are united in a political league called the Germanic Confederation. This is represented by a Diet, composed of representatives from the several States, which meets annually at Frankfort-on-the-Main.

While each State is left to regulate its own internal government, the discussion of such general matters as concern the interest of the whole body devolves upon the Diet. Austria occupies the first place in the Diet, Prussia the second, Bavaria the next, and the others in succession, according to their respective population and importance.

In religion, Germany is nearly equally divided between the Romish and Protestant Churches. The north of Germany is generally Protestant: the south and west chiefly Roman Catholic.

QUESTIONS ON THE SMALLER STATES OF GERMANY.

1. How many States, besides Austria and Prussia, does Germany embrace?
 2. Which are respectively the largest and the smallest of the number?
 3. What natural features distinguish, respectively, the northern and southern divisions of Germany?
 4. Name the principal rivers of Germany, with the seas into which they flow. Point to their courses on the map.
 5. What parts of Germany are rich in mineral produce?
 6. Among the smaller German States, which has the greatest population? Which comes second in this regard?
 7. How many of the smaller German States rank as Kingdoms? Name them, with the capital city of each.
 8. How many are Grand-Duchies? Give their names, and respective capitals.
 9. How many of the number are Duchies?
 10. In which States are the towns of Nuremberg, Ratisbon, Ulm, Leipzig, Mannheim, and Embden?
 11. Upon what rivers are the following places situated:—Munich, Dresden, Stuttgart, Altona, Mentz, and Heidelberg?
 12. In what States are the towns of Coburg, Weimar, Wiesbaden, Gotha, Brunswick, and Meiningen?
 13. To what kingdoms are the Grand-Duchy of Luxemburg and the Duchy of Holstein politically attached?
 14. One of the German States bears the title of an Electorate, and another that of a Landgraviate: name them, with the chief town of each.
 15. How many of the German States are Principalities? Which is the smallest of the number?
 16. Name the four Free Cities of Germany, with the river on which each is situated. Point them out upon the map.
 17. Under what general government are the German States embraced? By what body are they represented, and where does it assemble?
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DENMARK.

SITUATION, &c.—Denmark is a small country in the north of Europe. Denmark Proper consists of a peninsula and adjacent group of islands lying at the entrance of the Baltic

Sea. The Duchies of Sleswig and Holstein, on the adjoining continent, are attached to the Danish crown.

The boundaries of Denmark are—on the north, the Skagerrack ; on the east, the Kattegat and the Baltic Sea ; on the west, the North Sea ; on the south, Germany, of which country the Duchy of Holstein forms a portion.

The area of the kingdom of Denmark (including Holstein) is 21,800 square miles—equal to about two-thirds the size of Ireland, and considerably less than half that of England.

COASTS, &c.—The coast-line of Denmark is extensive, and its position is one favourable to maritime commerce. The three channels of entrance to the Baltic—known as the Sound, and the Great and Little Belts—lie between the Danish Islands and the mainland on either side. The Sound is between the island of Zealand and the coast of Sweden. The Great Belt is between the islands of Zealand and Funen : and the Little Belt between Funen and the coast of the Danish mainland.

Denmark terminates to the north in a point of land, or cape, called the Skaw.

NATURAL FEATURES.—Denmark is a flat country, often marshy towards the coasts, which in some places require to be protected by dykes, as in Holland.

RIVERS.—The two principal are the Eyder and the Trave, both of which are of small size. The Eyder flows into the North Sea, the Trave into the Baltic. The river Elbe forms part of the south boundary of Holstein.

CLIMATE AND PRODUCTIONS.—The climate of Denmark is somewhat colder than that of Britain, and is also moister. The chief sources of national wealth are found in the rich pastures, and in the fisheries carried on in the adjacent seas.

POPULATION AND INDUSTRY.—Denmark has rather fewer than two and a half millions of inhabitants. The Danes, properly so called, belong to the Scandinavian family of nations ; but the people of Holstein are of German race, and speak the German language.

The industry of Denmark is chiefly devoted to the soil. The rearing of cattle, with the culture of the land, employ the greater number of the people. Oxen, with butter and cheese, and other farm and dairy-produce, are largely supplied to other countries ; and a considerable amount of maritime commerce is thus carried on. The Danes are good sailors, and have always been noted for their devotion to maritime pursuits.

D TOWNS.—Denmark embraces the following

divisions—1. THE ISLANDS, of which Zealand is the largest : 2. JUTLAND, which is a peninsula : 3. SLESWIG, which is an isthmus to the south of Jutland, and connecting it with the mainland : 4. HOLSTEIN, which is a part of Germany. The chief towns are :—

<i>Divisions.</i>	<i>Towns.</i>	<i>Divisions.</i>	<i>Towns.</i>
THE ISLANDS....	Copenhagen, Elsinore.	SLESWIG.....	Sleswig, Flensburg.
JUTLAND.....	Aalborg, Aarhus.	HOLSTEIN.....	Altona, Kiel.

COPENHAGEN, the capital of Denmark, is on the east coast of the island of Zealand, beside the strait of the Sound. It has extensive docks, and great trade. *Altona*, the second city in the kingdom in point of size, is on the Elbe, adjoining the free city of Hamburg. *Flensburg* and *Kiel*, both situated on inlets of the Baltic coast, are thriving seaports.

The FARÖE ISLANDS, in the Atlantic Ocean, to the north of the British Islands ; and the large island of ICELAND, further to the northward, belong to the Danish Crown.

The Faröe Islands are steep rocks, which rise above the waters of a stormy sea. They have about 7000 inhabitants, who are chiefly occupied in fishing, or in collecting the feathers and down of the numerous birds which find shelter amidst their cliffs. They contain the small town of *Thorshavn*.

ICELAND is, next to Great Britain, the largest of European Islands. Its northern coasts just touch the border of the frigid zone. The climate is cold, and the surface generally barren—exhibiting a succession of volcanic mountains and plains covered with lava. Several of the volcanoes* are in occasional eruption—amongst them Mount Hekla, which is upwards of 5000 feet high.

The most remarkable feature of Iceland, however, consists in its boiling springs, or *geysers*, which are in the south-west corner of the island, near Mount Hekla. The geysers are fountains which at intervals throw up columns of hot water and

* A volcano is a burning mountain—that is, a mountain from which burning matter (as red-hot ashes, stones, and lava) is occasionally thrown forth. The mountain is at such times said to be in eruption. Of the substances thrown out by volcanic mountains, lava is the most curious. It is a mineral substance, rendered liquid by the intense heat which exists in the heart of the mountain, but which gradually cools and hardens as it flows down the mountain-side. The summit of a volcano generally has a depression, or hollow, called a *crater* (from the Latin, *crater*, a cup).

spray. The largest of them—called the Great Geyser—throws up a column of water to the height of 80 feet.

Iceland has about 60,000 inhabitants, who are chiefly employed in rearing cattle and other farm labours. The only town is *Reikiavik*, on the south-west coast.

GOVERNMENT, &c.—Denmark forms an hereditary monarchy, limited by provincial states. The sovereignty over Holstein, which is a Grand-Duchy of Germany, gives the King of Denmark a place in the Germanic Confederation. In religion, the people of Denmark are Protestants.

COLONIES.—Besides Iceland, Denmark has some settlements on the west coast of Greenland (North America), with three small islands in the West Indies.

QUESTIONS ON DENMARK.

1. How is Denmark bounded? Point to its place on the map.
 2. What cape forms the northernmost point of Denmark? What two channels does it adjoin?
 3. What portions of land do the straits called the Sound, the Great Belt, and the Little Belt, respectively divide?
 4. What two rivers belong to Denmark? Into what seas do they flow?
 5. Is Denmark a flat or a hilly country, and what kind of climate has it?
 6. In what branches of industry are the Danes chiefly engaged?
 7. Name the four great divisions of Denmark, and point to them upon the map.
 8. On what island is the capital of Denmark situated? What strait does it adjoin?
 9. Which of the divisions of Denmark forms part of Germany? What two cities does it contain?
 10. Where are the Farøe Islands? What town do they contain?
 11. Where is Iceland? What kind of natural features does it exhibit?
 12. What are the Geysers, and where are they situated?
 13. What foreign possessions belong to Denmark?
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SWEDEN AND NORWAY.

SITUATION, &c.—Sweden and Norway, which are distinct (though adjoining) countries, are under a single government—the Kingdom of Sweden and Norway. They form a large peninsula, situated in the north-west of Europe, between the

Atlantic Ocean and the Baltic Sea. Sweden is the eastern part of the peninsula : Norway its western side. Sweden and Norway are together known as Scandinavia.

The boundaries of Sweden and Norway are—on the north, the Arctic Ocean ; on the west, the Atlantic ; on the south, the Skager-rack, the Kattegat, and the Baltic ; on the east, the Baltic Sea, the Gulf of Bothnia, and part of Russia.

In size, Sweden and Norway are little short of 300,000 square miles—or considerably more than double the whole area of the British Islands.

COASTS.—The coasts of both Sweden and Norway are very indented and irregular ; those of Norway even more so than is the case with the Swedish shores. The numerous long and narrow arms of the sea which penetrate the coast of Norway are called *fjords*.* Many of the fjords are of great extent—running forty or fifty miles inland. They are bordered on either side by steep and lofty rocks.

CAVES.—The two principal are the North Cape and the Naze. The North Cape is the most northerly headland of Norway, and also of Europe. The Naze is the southernmost point of Norway.

ISLANDS.—The Lofoden Islands, off the west coast of Norway : the islands of Gothland and Oland, in the Baltic Sea, to the east of Sweden.

SURFACE.—Norway is a mountainous country, with a very elevated and irregular surface. Sweden is much less elevated, and consists for the most part of extensive plains, with a gradual slope towards the Baltic.

The whole of Norway is one vast mountain-region, which rises steeply out of the Atlantic Ocean. The waters of the ocean penetrate the mountain-wall, advancing far inland, and thereby forming the *fjords* which are mentioned above. The highest portion of the mountains bears the name of Dovre-field, and reaches more than 8000 feet above the sea. The Dovre-field, like the Norwegian mountains in general, is really a high mountain-plain.

RIVERS AND LAKES.—Both Sweden and Norway have a vast number of rivers—many of them mountain-torrents, but others expanding into considerable streams.

The two principal rivers of Sweden are the Dal and the

* The term *fjord* is peculiar to Scandinavian geography. The fjords of the Norwegian coast resemble the *locks* of the western coasts of Scotland.

Göta. The Dal runs into the Gulf of Bothnia : the Göta into the Kattegat.

The largest river of Norway is the Glommen, which runs into Christiania Fiord, at the head of the Skager-rack.

Lakes are numerous in both countries. The largest in Sweden are Wener, Wetter, and Mälar. The largest in Norway is Lake Miösen.

CLIMATE AND PRODUCTIONS.—Sweden and Norway have a climate which is considerably colder than that of England, owing to their higher latitude. But the air, in both countries, is generally dry and healthy, and the winters—though long—are less severe than in similar latitudes elsewhere. This is especially the case with Norway.

The most valuable among the natural productions of Scandinavia are found in its mines, its forests, and its fisheries. Copper and iron are abundant in both countries. The extensive forests furnish an inexhaustible supply of timber (chiefly pine, or the wood popularly known as *deal*), which is largely exported to other nations. The fisheries among the Lofoden Islands, and upon the Baltic coasts, are an important source of national wealth.

POPULATION AND INDUSTRY.—Sweden and Norway are thinly-peopled countries—necessarily so, from the vast extent of their mountains and forests, and the severity of the climate towards their northern limits. Norway, which consists almost wholly of mountains, is the least populous among the countries of Europe.

The population of Sweden numbers about three and a half millions ; that of Norway, one and a half millions. In Norway, it is only the shores of the fiords that are capable of habitation, and it is in such localities that the few towns are uniformly situated.

It is only in the south of Sweden that agriculture is much pursued. But the people of both countries are expert seamen, and a great deal of maritime commerce is carried on. Their iron and copper, their timber, and the produce of their fisheries (dried and salted, for consumption by other nations,) give the industrious Swedes and Norwegians a place in the general markets of the world. They export these things in return for the luxuries and various native produce of other lands.

The extreme north of Sweden and Norway is inhabited by the Laplanders, a people of pastoral habits, whose sole wealth consists in their herds of rein-deer.

DIVISIONS AND TOWNS.—Sweden embraces three great divisions, called Sweden Proper, Gothland, and Nordland. These are further divided into governments, or *län*s. Norway also forms three great divisions—Sondenfields, Nordenfields, and Nordlandens, which are subdivided into districts, or *amts*. The principal towns in each are as follow :—

IN SWEDEN.		IN NORWAY.	
<i>Divisions.</i>	<i>Towns.</i>	<i>Divisions.</i>	<i>Towns.</i>
SWEDEN PROPER.....	Stockholm, Upsal.	SONDENFIELDS.....	Christiania.
GOThLAND.....	Gottenborg, Carls- crona.	NORDENFIELDS.....	Bergen, Dronthiem.
NORDLAND	Sundsval.	NORDLANDENS.....	Hammerfest.

STOCKHOLM is the capital of Sweden, and the seat of general government for the two countries. It occupies a highly picturesque situation at the entrance of the Mälar lake, near the coast of the Baltic. *Upsal*, one of the most ancient of Swedish cities, and the seat of a famous University, is to the north-west of the capital. *Carlsrona*, on the south coast, is the naval arsenal of the kingdom. *Gottenborg*, at the outlet of the river Göta into the Kattegat, is the second city in Sweden in amount of population and commercial importance.

CHRISTIANIA, the chief city of Norway, lies at the head of a long fiord called by its name. *Bergen*, on the west coast, is the second place in point of size, and is a great station for the Norwegian fisheries. *Dronthiem*, further to the northward, is an ancient city, the former capital of the country. *Hammerfest*, only a short way from the North Cape, possesses the distinction of being the most northerly town in Europe.

GOVERNMENT, &c.—The government of Sweden and Norway is an hereditary and limited monarchy. Norway retains some peculiar privileges, and has a separate legislative assembly. In religion, the people of both countries are Lutherans, or members of the Reformed Church.

COLONIES.—The small island of St Bartholomew, in the West Indies, belongs to Sweden.

QUESTIONS ON SWEDEN AND NORWAY.

1. In what part of Europe are Sweden and Norway situated? Name their boundaries.
2. By what are the coasts of Norway distinguished?

3. What capes form respectively the extreme north and south points of Norway?
4. What islands belong to Norway, and where are they situated? What islands to Sweden, and where?
5. What kind of a country is Norway, as to the features of its surface?
6. Name the principal rivers of Sweden and Norway, with the seas into which they flow.
7. Mention the three principal lakes of Sweden; also the largest lake of Norway.
8. What natural productions of value do Sweden and Norway possess?
9. In what does their commerce chiefly consist?
10. Name the three divisions of Sweden, with the principal town of each.
11. What city forms the capital of Sweden, and how is it situated?
12. Point on the map to the chief city of Norway. At the head of what inlet does it stand?
13. Where are the following places:—Carlskrona, Bergen, Dronthiem, and Hammerfest? Point them out on the map.
14. What is the form of government, and what the national religion, in Sweden and Norway?

RUSSIA.

SITUATION, &c.—Russia is a country of eastern Europe. It is of vast extent, embracing more than half the European continent.

Russia is bounded on the north by the Arctic Ocean; on the west by the Baltic Sea, Prussia, and Austria; on the south by Turkey, the Black and Caspian Seas, and Mount Caucasus; on the east by Siberia (or Asiatic Russia). In size, Russia includes 2,000,000 square miles. In distance from north to south, it measures upwards of seventeen hundred miles, and about the same in the direction of east and west.

COASTS.—Russia possesses a coast-line upon four inland seas—the Baltic, Black, Caspian, and White Seas, besides part of the shores of the Arctic Ocean. The high latitude (and consequently cold climate) of the White Sea and adjoining ocean limits their navigation to a short period of each year, during which alone they are free from ice. The same thing is the case, during some months annually, with the Baltic Sea. Both the Baltic and the Black Seas are nearly land-inclosed—only communicating with the ocean by narrow straits, which are in the keeping of other nations. The Caspian is merely a vast lake, without outlet.

The peninsula of the Crimea indents the shores of the Black Sea, and is connected with the mainland by the isthmus of Perekop. The Sea of Azov is an arm of the Black Sea, from

which it is entered through the strait of Kertch, or Yenikaleh. The Gulf of Finland is an arm of the Baltic.

NATURAL FEATURES.—Russia exhibits a succession of immense and nearly level plains, which slope gradually towards the Baltic, Black, Caspian, and White Seas. The most perfectly level of these plains are in the south-easterly division of the country, where they are called *steppes*. The steppe is an open plain, without trees, and generally without any perennial streams. Its surface, during the dry season of the year (the period of summer and autumn), is parched, arid, and often sandy, the vegetation burnt up by the intense heat; but at other times it exhibits a luxuriant expanse of grass, upon which the inhabitants pasture immense herds of horses and cattle. The lowest portions of the steppe-land are towards the Caspian Sea, where the soil is often impregnated with saline particles, and salt-water lakes are of frequent occurrence.

The only mountains belonging to European Russia are the Ural and the Caucasus. The Ural are on the eastern, Mount Caucasus on part of the southern, border-line. The Caucasus is very elevated—covered in its higher portion with perpetual snow.

RIVERS.—The principal are—

Neva.....	} into the Baltic Sea.	Don.....	into the Sea of Azov.
Dvina.....		Volga.....	} into the Caspian Sea.
Niemen.....		Ural.....	
Unlester.....		Northern Dvina.....	} into the White Sea.
Dnieper.....	} into the Black Sea.	Onega.....	
Kouban.....		Petchora.....	into the Arctic Ocean.

The Volga is the longest of European rivers. The Neva has the capital of the Russian Empire, St Petersburg, at its mouth, and is the outlet for the great lakes. The arm of the Baltic into which it discharges is called the Gulf of Finland.

LAKES.—The two largest are Ladoga and Onega: next are Saima, Peipous, Enara, Bieloe, and Ilmen. All of these are in the north-west part of the country, most of them situated near the Baltic Sea. Lake Ladoga is the largest lake in Europe, and covers more than 6000 square miles. There are some shallow salt-water lakes in the steppes: the largest of them is Lake Ielton, situated east of the Volga.

CLIMATE AND NATURAL PRODUCTIONS.—Russia has great variety of climate, owing to its extensive range of latitude. Its northern part is cold, compared with the climate of England, but towards the south it becomes warmer. The Russian win-

ters are very long and severe, while the summers are intensely hot. These extremes of heat and cold are experienced throughout Russia, but more so within the steppe-region than elsewhere.

The forests of Russia furnish some of its most valuable productions—timber, tar, pitch, turpentine, and potash. Its mines of iron and platinum, within the district of the Ural, are also of high value.

POPULATION AND INDUSTRY.—Russia is very thinly peopled, considering its vast size, though the total number of its population is large. It has more than sixty millions of inhabitants. The vast majority of them are engaged in agriculture, for Russia is principally a corn-growing country. The central and southwardly portions of its great plains, with the exception of the steppe-region, are annually covered with crops of the finest wheat. Rye and other grains, and also hemp and flax, are very largely grown. Vast numbers of cattle are reared on the steppes.

The metal-works carried on within the valleys of the Ural display a high degree of manufacturing skill. But Russia is not, upon the whole, a manufacturing country. It has a great deal of foreign commerce, exporting corn, hemp, tallow, hides, and bristles; with timber, potash, and other productions of its vast forests.

DIVISIONS AND TOWNS.—Russia is divided into fifty governments—besides Finland and Poland, which are distinct from the rest. Including these two, the whole number of provinces, or governments, is fifty-two.

Finland was formerly a part of the Swedish monarchy, and only became attached to Russia in 1809. Poland was long a distinct and powerful kingdom. The territory to which the title of “kingdom of Poland” is now given, is merely a Russian province, and embraces only a small part of the country formerly known by that name.

Five of the Russian governments (including Finland amongst the number) are called—from their situation—the Baltic Provinces. Nineteen of them—those lying within the central portion of the empire—are distinguished as Great Russia: four (in the south-west, towards the river Dnieper) as Little Russia. Nine governments are known as West Russia: these embrace territories which formerly belonged to Poland. Five of the governments are known as South Russia, and nine as East Russia.

<i>Divisions.</i>	<i>Towns.</i>	<i>Divisions.</i>	<i>Towns.</i>
BALTIC PROVINCES...	St. Petersburg, Cronstadt, Riga, Revel, Helsing- fors.	LITTLE RUSSIA.....	Kiev, Poltava.
GREAT RUSSIA.....	Moscow, Toula, Nijni-Novgorod, Smolensk, Archangel.	WEST RUSSIA (in- cluding Poland)...}	Warsaw, Wilna.
		SOUTH RUSSIA.....	Odessa, Niko- laev, Sevasto- pol, Kertch.
		EAST RUSSIA.....	Kazan, Saratov, Astrakhan, Perm.

ST PETERSBURG, the capital of the Russian Empire, stands beside the mouths of the river Neva, at the head of the Gulf of Finland. It has upwards of half a million inhabitants, and ranks third among European capitals in order of population. St Petersburg is a splendid city, of modern origin, having been founded by Peter the Great in the year 1702. *Cronstadt*, the port and naval arsenal of St Petersburg, is on an island in the Gulf of Finland, a few miles to the west of the capital.

Riga, at the outlet of the river Dvina into the Gulf of Riga (an arm of the Baltic), is an important seaport, one of the chief seats of Russian commerce. *Revel*, at the entrance of the Gulf of Finland, is also a port of some note. *Helsingfors*, on the north side of the gulf, is the provincial capital of Finland: it is defended by the fortified works of Sveaborg, which occupy several small islands in front of the port.

The ancient city of *Moscow* (with nearly 400,000 inhabitants), in the heart of Russia, was long the capital of the empire, and is still the favourite object of Russian regard. Moscow stands on the river Moskva, an affluent of the Oka, which latter river joins the Volga. About 60 miles W. of Moscow is the village of Borodino, the scene of a bloody engagement between the French and Russian armies in 1812. *Nijni-Novgorod*, at the junction of the Oka and Volga, is an important seat of inland trade, distinguished by its great annual fair, the gathering-place of traders from nearly every nation of Europe and Asia. *Archangel*, near the mouth of the northern Dvina, is the chief port for the commerce of the White Sea; but its harbour is only free from ice during three months of each year. *Kiev*, on the river Dnieper, is an ancient city, the seat of considerable trade. *Warsaw*, on the river Vistula, was the capital of the Polish monarchy, and is still a large city, though fallen from its former greatness.

Odessa, on the Black Sea, is the chief seaport of southern Russia, and has a vast trade, chiefly in the export of corn.

Nikolaev, further to the east, is on the river *Boug* (above its junction with the *Dnieper*): it has become the chief naval station of Russia in the Black Sea, since the destruction of *Sevastopol*, by the united armies of France and England, in 1855. *Sevastopol*, now a small and comparatively unimportant place, is on the western shore of the Crimea. *Kertch* is a seaport on the east coast of the Crimea, beside the strait which leads into the Sea of Azov.

Kazan, in Eastern Russia, is a large city to the east of the *Volga*. *Saratov* is on the west bank of that river. *Astrakhan*, the chief port for the commerce of the Caspian, is on the *Volga*, a few miles above its mouth.

GOVERNMENT, &c.—Russia is an absolute monarchy, the sovereign bearing the title of Czar, or Emperor. The great mass of the people are serfs, in a social condition but little superior to absolute slavery, and rated as the property of their owners, like so many head of cattle. Some progress has, however, been made within a recent period towards the emancipation of the serfs. An immense standing army is maintained in Russia, and everything is regulated according to the rules of military discipline. In religion, nearly all the people of Russia are followers of the Greek Church.

QUESTIONS ON RUSSIA.

1. Name the boundaries of Russia, pointing to them on the map.
 2. In point of size, what proportion does Russia bear to Europe as a whole? What are its dimensions from north to south?
 3. What seas adjoin the coast-line of Russia? In what way are they connected with the ocean?
 4. What are the general features of Russia, as to its surface?
 5. What are the steppes, and in what part of Russia are they?
 6. Name the principal rivers of Russia, with the seas into which they flow.
 7. Mention the chief lakes. Which two of them are largest in size, and what river forms their outlet?
 8. By what is the climate of Russia distinguished? In which part of the country is this characteristic most strongly marked?
 9. What articles of utility are derived from the extensive forests of Russia?
 10. In what part of Russia is mineral produce abundant? Of what articles does it consist?
 11. To what number does the total population of Russia amount? Is this relatively large, or small, as compared with the size of the country?
 12. What industrial pursuit employs the greater number of the Russian population?
 13. What articles of commercial produce does Russia export?
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14. Into how many governments is Russia (including Poland and Finland) divided?
 15. What six great divisions has Russia?
 16. On what river does the capital of Russia stand? Point to it on the map.
 17. What city was the ancient capital of the Russian Empire? On what river is it?
 18. In what part of Russia are Helsingfors, Nijni-Novgorod, Kiev, Odessa, Nikolaev, and Sevastopol? Point out their places on the map.
 19. On what rivers are Riga, Kiev, Warsaw, Archangel, and Astrakhan?
 20. What form of government has Russia, and what is the national religion?
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TURKEY.

SITUATION, &c.—Turkey is a large country of southern Europe. It is bounded on the north by Austria; on the west by the Adriatic and Mediterranean Seas; on the south by Greece, the waters of the Archipelago, and the Sea of Marmora; on the east by the Black Sea and the empire of Russia.

Turkey includes an area of 210,000 square miles; so that in point of size it is rather larger than France, and about four times the magnitude of England.

COASTS AND ISLANDS.—Turkey possesses the channels of entrance to the Black Sea—the Dardanelles and the Strait of Constantinople, together with the intervening Sea of Marmora. These channels divide European from Asiatic Turkey, but the same sovereignty—symbolised by the crescent, the standard of the Mohammedan faith—exercises rule upon either shore.

The islands of the Archipelago belong for the most part to the kingdom of Greece; but those that lie near its northern and eastern shores are Turkish. The island of Candia, to the south of the Archipelago, belongs to Turkey.

MOUNTAINS AND PLAINS.—Turkey is generally mountainous, though containing some level districts of large extent. Of mountains, the chief are the Balkan, the Dinaric Alps, and the chain of Pindus.

The Balkan Mountains stretch across the centre of Turkey, in the direction of east and west. The Dinaric Alps (which are an outlying portion of the great mountain-system of the Alps) extend along the shores of the Adriatic. They become united to the western extremity of the Balkan system in a high group called Sharra-tagh, which reaches 10,000 feet above the sea. The chain of Mount Pindus branches off to the south

of the Sharra-tagh, and extends in that direction into Greece—forming a sort of back-bone to the peninsular portion of Turkey, and dividing the waters of its eastern and western seas.

The northern division of Turkey contains the extensive plains of Bulgaria and Wallachia, which are watered by the Danube and its tributary streams.

RIVERS AND LAKES.—The Danube is the most considerable river of European Turkey. It first forms part of the Turkish frontier at Belgrade, and below the pass called the Iron Gate (on the border of Servia and Wallachia) becomes wholly Turkish, flowing onward to the Black Sea, which it enters by several mouths. Within the Turkish territory, the Danube is joined by the following tributaries :—the Morava, on its south bank ; the Aluta, Sereth, and Pruth, on the north side.

Among the other rivers of Turkey are the Maritza* (ancient *Hebrus*), Kara-su (anc. *Nestus*), Struma (anc. *Strymon*), Vardar (anc. *Axius*), and Selebria (anc. *Peneius*), all of which flow into the Archipelago.

The lakes are Skutari, Ochrida, and Ianina—all three situated on the western side of Mount Pindus, within the Adriatic and Mediterranean basins.

CLIMATE AND PRODUCTIONS.—Most parts of Turkey have a warm and delightful climate—much warmer than that of England, as is the case with all the countries that border on the Mediterranean. But to the north of the Balkan the winters are severe.

The productions of the vegetable kingdom are exceedingly rich and varied. Evergreen foliage distinguishes the southern and south-western slopes of Turkey. The vine grows luxuriantly to the south of the Balkan, and the fig, olive, and mulberry are abundant : the orange also thrives. Corn is grown abundantly in the provinces watered by the Danube. Iron and other minerals abound in the hilly tracts adjoining the Balkan chain, but are only worked to a limited extent.

POPULATION AND INDUSTRY.—Turkey has 15,500,000 inhabitants, which is a small number for so large a country. The Turks, who are the ruling people, and give their name to the empire, are only a small minority of the population. The extensive provinces that lie between the Balkan and the Danube are inhabited by people of Slavonic race. Wallachia

* These rivers are better known by their ancient names—rendered familiar by frequent mention in classic story—than by their modern appellations.

and Moldavia, to the north of the Danube, are peopled by a race called the Rouman, who have a distinct language. The inhabitants of Albania are called Arnauts. In all the southern parts of the empire Greeks are numerous.

Turkey is a badly-governed country, and the pursuits of industry are hence at a low ebb. Its great natural capabilities—in soil, climate, and vegetation—are for the most part neglected. In the northern provinces, within the valley of the Danube, vast numbers of oxen and sheep are reared on the rich natural pastures. In the towns, the preparation of morocco leather is pursued with considerable skill. There are works in metal upon a scale of some magnitude in the towns of Bulgaria. In Albania and the other mountain-provinces, the people are chiefly shepherds.

Fruits, olive-oil, wax, honey, and other natural produce—with wool, tobacco, morocco leather, and carpets (the latter worked by the women of the nomade tribes who occupy portions of Asiatic Turkey)—form the exports of Turkey. The amount of its trade is considerable, and a large portion of it is carried on with Britain. The Greeks are the chief agents in this trade.

DIVISIONS AND TOWNS.—Turkey includes the following:—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
ROUMELIA	Constantinople, Adrianople, Saloniki, Gallipoli.	BOERNIA	Bosna-serai.
THESSALY	Larissa.	SERVIA	Belgrade.
ALBANIA	Skutari, Ianina.	BULGARIA	Sophia, Shoumla, Silistria, Varna.
HERZGOVINA	Mostar.	WALLACHIA	Bukarest.
CROATIA	Banialouka.	MOLDAVIA	Jassy.

CONSTANTINOPLE is the capital of the Turkish Empire. It stands at the southern entrance of the Channel of Constantinople—the Thracian Bosphorus of the ancients—in a commanding situation. *Adrianople*, the second city of Turkey, is on the banks of the river Maritza (or Hebrus), to the north-west of the capital. *Gallipoli* is on the northern shore of the Dardanelles (the Hellespont of ancient geography). *Saloniki* (anciently Thessalonica) is at the head of a gulf in the north-western corner of the Archipelago, and is a place of considerable trade.

Belgrade, the capital of Servia, and the frontier-city of Turkey on the side of Austria, stands at the junction of the river Save with the Danube. It possesses great historic note, in connexion with the wars of the fifteenth and sixteenth

centuries between the Turks and Hungarians, but has decayed from its former importance. *Sophia* is a commercial city, lying within the Balkan region. *Shoumla*, also a commercial city and a fortress of great strength, is in the eastern part of Bulgaria. *Varna* is on the shore of the Black Sea.

Numerous commercial towns and ports line the banks of the Danube in its course through Turkey. Widin, Nikopoli, Ruschuk, and Silistria, on the south bank, Galatz and Ismail on the north side, are among the most celebrated. Both Silistria and Ismail occupy prominent places in the records of Turkish and Russian warfare.

GOVERNMENT, &c.—The government of Turkey is a despotic monarchy, in which the Sultan (as the sovereign is called) exercises an authority that is nominally absolute. The government of the various provinces is administered by pashas.

It is, however, only in portions of the empire that the central authority is really supreme. The provinces lying at a distance from Constantinople have a population in which the Turkish element is very small. Servia, to the south of the Danube, Wallachia and Moldavia, to the north of that river, constitute nearly independent principalities, under native rulers.

The Turks themselves are uniformly followers of Mohammed, but the bulk of the population of Turkey are members of the Greek Church.

The small territory of MONTE-NEGRO, which embraces part of the western declivities of the Dinaric Alps, is nominally a portion of Turkey, but forms in reality an independent principality, under a native ruler.

The people of Monte-negro, who number upwards of a hundred thousand, are hardy and warlike mountaineers. Their capital, and only town, is called *Zettin*.

QUESTIONS ON TURKEY.

1. How is Turkey bounded, and what is its magnitude as compared with England?
2. What mountain-chains are within the limits of European Turkey? Point to them on the map.

3. Trace on the map the course of the river Danube (within Turkey), and name the principal streams by which it is joined.
4. What five rivers flow through Turkey into the Archipelago? Give their ancient as well as modern names.
5. What kind of climate has Turkey? Name some of its vegetable productions.
6. By what races of people are the different provinces of Turkey inhabited?
7. What articles of produce does Turkey export?
8. In what province of Turkey is Constantinople situated? What advantages of position belong to its site?
9. Name the chief towns of the following provinces:—Thessaly, Albania, Servia, Wallachia, and Moldavia.
10. In which provinces are the following:—Shoumla, Sophia, Ianina, and Bosna-serai?
11. In what part of Turkey are the following seaports:—Saloniki, Gallipoli, and Varna? Point them out on the map.
12. What towns are situated on the Danube, in its course through Turkey?
13. What form of government prevails in Turkey, and how is the sovereign generally styled?
14. Which of the Turkish provinces constitute semi-independent principalities?
15. What is the religion of the Turks themselves, and what that of the majority of the population of Turkey?
16. Where is Monte-negro, and what is its chief town?

GREECE.

SITUATION, &c.—Greece is a small country in the south of Europe. It is bounded on the north by Turkey, on the west and south by the Mediterranean, on the east by the Archipelago. Its area is 15,200 square miles—equal to about half the size of Scotland, and little more than double that of Wales.

COASTS.—The mainland of Greece has the sea upon three sides, and its coasts are indented by a vast number of inlets. The whole country is a peninsula, which is subdivided and broken up into several smaller peninsulas.

The southerly portion of Greece forms the Morea,* a peninsula which is nearly divided from the rest of the mainland by the Gulf of Corinth. The Isthmus of Corinth (only three miles across) unites this peninsula to Northern Greece.

CAVES.—The two principal are Cape Matapan† and Cape Colonna‡. The former is the extreme south point of the Morea. The latter is the southward termination of the peninsula of Attica, in Northern Greece.

ISLANDS.—A large portion of Greece consists of islands,

* *Peloponnesus* of ancient geography.

† *Tandrum Promontorium*.

‡ *Sunium Promontorium*.

which are thickly scattered over the Archipelago. The largest is Negropont, or Eubœa. The smaller islands are Kuluri, Egina, Hydra, Spezzia, Andro, Tino, Mikoni, Syra, Zea, Thermia, Serfo, Sifanto, Milo, Paro, Naxo, Amorgo, and Santorin, with many others. Santorin is the seat of volcanic fires, which are almost constantly burning.

MOUNTAINS.—Every part of Greece is mountainous. The highest elevations reach upwards of 8000 feet above the sea. Mount St Elias (the ancient *Taygētus*), in the south of the Morea, is one of the most celebrated.

The mountains known to the ancients by the names of Ceta, Parnassus, Helicon, Cithæron, with others that are famous in classic story, are within the limits of Northern Greece—that is, to the north of the Gulf of Corinth.

Greece has no rivers of any magnitude. The small streams by which the country is watered, though bearing names that are famous in the records of past ages, are for the most part mere torrents.

CLIMATE AND PRODUCTIONS.—Greece has a warm and delightful climate, and, though much of its surface is occupied by sterile rock, yet the vegetation is richly abundant wherever sufficient soil can be found for its growth. The vine and the olive—the orange, lemon, citron, fig, and mulberry—are amongst its native fruits. The cotton-plant grows wild, as also does madder. The honey of Attica still preserves its ancient fame.

The various marbles and building-stones of Greece are of deserved celebrity. The island of Paro, in particular, yields the finest statuary marble. Mineral springs are very numerous, and many of the running streams are lost in subterranean chasms.

POPULATION AND INDUSTRY.—The kingdom of Greece has scarcely more than one million of inhabitants, but the modern Greek race is spread all over the Levant (or eastern Mediterranean). The Greeks are quick, intelligent, and enterprising; insincerity and falsehood are also distinguishing attributes of the nation, as they were in past ages.

The industry of Greece is chiefly pastoral, but a considerable amount of trade is carried on from the various ports. Currants and other fruits, olive-oil, honey, tobacco, cotton, and corn, are the exportable produce of the country.

DIVISIONS AND TOWNS.—The country is naturally divided into Northern Greece (the part of the Greek mainland which

is to the north of the Gulf of Corinth), the Morea, and the Islands.

<i>Divisions.</i>	<i>Towns.</i>
NORTHERN GREECE.....	Athens, Livadia, Thiva, Lepanto.
THE MOREA.....	Nauplia, Corinth, Patras.
THE ISLANDS.....	Syra, Egripo (or Negropont).

ATHENS is the capital of modern Greece. It is on the western side of the peninsula of Attica, about five miles distant from the harbour of the Piræus, which forms its port. Athens is a city of very moderate size (about 32,000 inhabitants), but greatly surpasses in this respect any other place in Greece. The interest belonging to localities in this classic land depends upon their association with the events of a past age. The sites of Marathon and Salamis are not far distant from the capital—the former twenty miles to the north-east. Salamis is represented by the modern Kuluri, an island in the Gulf of Athens.

Thiva, a small town to the north-west of Athens, represents the Boeotian Thebes. Further west, a short distance from the shore of the Gulf of Corinth, and at the foot of Parnassus, is the village of *Kastri*, the ancient Delphi—the oracle of Apollo, and the fabled haunt of the Muses. Nearly due north of *Kastri*, on the shore of the strait which flows between the mainland and the island of Negropont, is Thermopylæ.

Nauplia and *Patras*—both situated upon the coasts of the Morea—are, next to the capital, the most important seats of Greek commerce. Patras lies near the entrance of the Gulf of Corinth. Nauplia is at the head of a gulf upon the eastern side of the peninsula, in the vicinity of the ancient Argos. *Corinth*, near the isthmus to which its name is given, is now small and unimportant; as also is *Sparta*, in the southerly portion of the Morea.

Syra, on the island of that name, is commercially the most important among the towns of insular Greece. The little island of Delos—the fabled birth-place of Apollo and Artemis—is only a few miles east of Syra (between the two larger islands of Rhenea and Mikoni).

GOVERNMENT, &c.—The modern kingdom of Greece was established in 1822, after a prolonged struggle on the part of the Greeks to free themselves from Turkish mastery, to which

they had during a long prior period been subject. It forms a limited and hereditary monarchy. The Greek Church represents the established form of religion.

THE IONIAN ISLANDS.

The IONIAN ISLANDS are situated to the west and south of Greece. They comprehend Corfu, Paxo, Santa Maura, Ithaca, Cephalonia, Zante, and Cerigo, with many smaller islets.

These islands exhibit for the most part a rocky and even mountainous surface. They enjoy a delightful climate, and have a soil which (at least in some localities) is fertile and productive. The small species of vine which yields the Corinthian grape (the fruit of which reaches our own shores under the familiar name of *currants*) is their most characteristic article of produce. The olive also flourishes.

The inhabitants of the Ionian Islands are of the Greek race. They number rather more than 250,000. The largest of the islands is Cephalonia; Corfu is second in size, and Zante third. Corfu and Zante are the most populous and industrious of the number.

The Ionian Islands form a dependent state, under the protection of Great Britain. The government is administered by a Lord High Commissioner, appointed by the British Crown. The town of *Corfu*, on the island of that name, is the seat of government.

QUESTIONS ON GREECE.

1. In what part of Europe is Greece? How is it bounded?
2. What peninsula forms part of Greece, and by what is it joined to the mainland?
3. Name the two most important capes of Greece, and point them out on the map.
4. Name some of the Greek islands. Which of the number is distinguished as the seat of volcanic fire?
5. What mountains, well known in classical antiquity, are within the limits of modern Greece?
6. What kind of climate and soil has Greece? Name some of the fruits that are native to its soil.
7. To what pursuits is the industry of Greece chiefly devoted? What articles of produce does it export?
8. What are the three divisions of modern Greece? Point to them on the map.
9. What city forms the capital of Greece? Point to its place on the map.
10. In what part of Greece are the following sites:—Marathon, Salamis, Delphi, Thermopylae, Sparta, and Argos?

11. What two places are—next to Athens—the chief seats of Greek commerce?
 12. Where is Syra? What island, famous in classic story, is within the neighbouring portion of the Archipelago?
 13. Where are the Ionian Islands? Mention them by name.
 14. What article of commerce forms the chief produce of the Ionian Islands?
 15. How are the Ionian Islands governed? What town constitutes the seat of government?
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ITALY.

SITUATION, &c.—Italy is a large country of southern Europe. The greater portion of it forms a peninsula, which advances far into the Mediterranean.

Italy is bounded on the north by Germany and Switzerland; on the west by France; on the south-west and south by the Mediterranean Sea; on the east by the Adriatic Sea.

In shape Italy is likened to a boot, the two smaller peninsulas into which it divides in the south forming respectively the toe and the heel.

COASTS, GULFS, &c.—The coast-line of Italy is very extensive, and includes a great number of good harbours. The Adriatic Sea (the northerly part of which forms the Gulf of Venice), the Gulf of Taranto, the Bay of Naples, and the Gulf of Genoa, are all of them arms of the Mediterranean.

The straits are—Strait of Otranto (at the entrance of the Adriatic), Strait of Messina (between Italy and the island of Sicily), Strait of Bonifacio (between the islands of Sardinia and Corsica).

CAVES.—The principal are Spartivento and Di Leuca. Cape Spartivento is the most southerly point of the Italian mainland: Cape Di Leuca is the south-east point.

ISLANDS.—The three large Italian islands are Sicily, Sardinia, and Corsica—the last named of which belongs politically to France. The smaller islands are Malta, the Lipari Islands, Elba, and several others of less note lying near the western coasts of the peninsula. Malta belongs to Great Britain.

MOUNTAINS.—A large portion of Italy is mountainous. The principal mountains are the Alps, which encircle the north of Italy, forming its frontier on the side of France, Switzerland, and Germany. All the higher portions of the Alps are covered with unmelting snow; but the glacier-region is chiefly upon their northern declivities, beyond the Italian limits. Mont Blanc, the highest of the Alps, is on the border-line of Piedmont and Savoy, within the Sardinian territory.

The Apennines, which are much less elevated than the Alps, run through the length of the Italian peninsula—branching off from the Alps near the head of the Gulf of Genoa.

Mount Vesuvius, which is the only active volcano upon the mainland of Europe, is on the west side of Italy, near the shores of the Bay of Naples. Mount Etna, on the island of Sicily, and also an active volcano, is of much more considerable height, reaching upwards of 10,000 feet above the sea. Stromboli, one of the Lipari Islands, is a volcano in constant activity.

PLAINS.—The largest is the Plain of Lombardy, which includes the north-east part of Italy, between the Alps and the Apennines. It is watered by the rivers Po and Adige, with their numerous tributaries, and is one of the most fertile regions of Europe. Less extensive plains border the eastern and western coasts of the Italian peninsula, between the Apennines and the sea.

RIVERS AND LAKES.—The chief rivers of Italy are—the Po, Adige, Arno, and Tiber. The two former enter the Adriatic: the others flow into the Mediterranean.

The Po is the only large river of Italy. The other streams are of comparatively little importance in a merely geographical sense, though of great historic fame. In Italy, as in Greece and other lands, many localities which in themselves claim little regard, acquire interest from their association with the great events of a former age.*

The principal Italian lakes are Maggiore, Lugano, Como, and Garda, situated among the southern valleys of the Alps; with Perugia, Bolsena, Bracciano, and Fucino, in the middle portion of the peninsula. Albano and Nemi are smaller lakes, a few miles south of Rome.

CLIMATE AND PRODUCTIONS.—The climate of Italy is warm, as is the case with all the countries that border upon the Mediterranean. It is also, for the most part, dry and healthy. But in particular parts of Italy the air is very unhealthy, especially at some seasons of the year. This is the case in the coast-district of Tuscany, and in certain parts of the

* The stream of the Rubicon—in ancient times the limit between Roman Italy and the province of Cisalpine Gaul—is an example of this. It is believed to correspond to a little torrent now called the Fiumecino—one of a vast number of mountain-torrents that descend from the eastern slope of the Apennines. The Fiumecino enters the Adriatic in lat. $44^{\circ} 11'$.

Roman territory, to the south and west of the city of Rome.

The vegetation of Italy is rich and luxuriant, in a degree which greatly surpasses that of countries that lie beneath a more northern sky. A rich evergreen foliage clothes the sides of the hills, and the plains are covered with the vine, the olive, the fig, and the mulberry, besides yielding abundant crops of the finest wheat and other corn. In mineral produce, Italy is chiefly distinguished for the sulphur supplied by Naples and Sicily, and the iron worked in the island of Elba. Marbles and building-stones of the finest quality abound throughout the country.

POPULATION AND INDUSTRY.—Italy contains more than 25,000,000 of inhabitants. It is one of the most populous countries of Europe, estimated with reference to the comparative number of inhabitants to extent of surface. In appearance, manners, and language, the Italian people are one race.

The industry of Italy is both varied and considerable. It is, on the whole, an agricultural rather than a manufacturing country. Yet there are extensive manufactures in some parts of Italy, and the amount of its foreign commerce is very large.

Wheat, olive-oil, silk, straw-plait, and wines, are among the productions of Italian industry. The culture of the vine, the olive, and the mulberry, is pursued, on a scale of greater or less magnitude, throughout the country. Lombardy is especially distinguished for the mulberry, which is reared for the purpose of supplying the food of the silk-worm. Sardinia and Tuscany are more particularly noted for their olive-oil; Tuscany also for its straw-hats and plait. The north of Italy—Lombardy and the adjoining provinces of Sardinia—is its most manufacturing portion. The silks supplied from the Sardinian looms are of high repute, rivalling those of France.

DIVISIONS.—Italy is politically divided between five principal States, with four of smaller size. The principal States are—the Kingdom of Sardinia, the Kingdom of Naples and Sicily, the States of the Church, the territory of Venetia (which forms part of the Austrian Empire), and the Grand-duchy of Tuscany. The smaller States are—the Duchy of Parma, the Duchy of Modena, the Republic of San Marino, and the principality of Monaco.

1.—KINGDOM OF SARDINIA.

The Kingdom of Sardinia takes its name from the island of Sardinia. But by much the larger portion of its territory is on the Italian mainland. Besides Piedmont, Savoy, and the maritime tract which borders on the Gulf of Genoa, it has become increased, since the brief Italian campaign of Napoleon III. in 1859, by the acquisition of the rich province of Lombardy, the most fertile and populous portion of Italy. The Sardinian monarchy now comprises a population of more than 8,000,000.

Piedmont, as the name indicates, is the tract of country lying at the foot of the Alps, and watered by the upper course of the Po and its numerous tributary streams. The river Ticino, one of the tributaries of the Po, divides Piedmont from Lombardy, but the eastern frontier of the Sardinian monarchy is now extended to the line of the Mincio. The north-western province—Savoy—is to the north of the Alps, and by geographical position, as well as by the character and habits of its people, is rather French than Italian.

The principal towns of Sardinia are as follow :—

PIEDMONT.....	Turin, Alessandria.
GENOA.....	Genoa.
NICE.....	Nice.
SAVOY.....	Chambery.
LOMBARDY.....	Milan, Pavia, Brescia, Como.
ISLAND OF SARDINIA.....	Cagliari.

Turin is the capital of the Sardinian monarchy. It stands on the left bank of the Po, in the heart of Piedmont, and is among the most important of Italian cities. *Alessandria*, to the south-east of Turin, is on the river Tanaro, which joins the Po. *Maréngo*, the scene of one of the victories of Napoleon I., in 1800, is near *Alessandria*.

Genoa, one of the great cities of Italy, the former rival of Venice in commercial prosperity, lies on the shore of the Mediterranean, at the head of the gulf to which its name is given. *Nice*, also on the coast, is near the French border: the port of *Villafranca* adjoins it to the eastward. The little town of *Monaco*, seven miles east of Nice, ranks as the capital of a sovereign principality.

Milan, the chief city of Lombardy, and the former capital of Austrian Italy, is a splendid city, noted for its cathedral

and its marble palaces. It stands on the river Olona, one of the many affluents of the Po. *Pavia* is to the south-west of Milan.

The plains of Piedmont and Lombardy, like those of the Low Countries, have been the frequent battle-field of nations, and abound in localities of historic fame. Marengo, Montebello, Lodi, and Arcola, are among the places distinguished in the earlier campaigns of Napoleon I. Palestro, Magenta, and Solferino, have a like repute in connexion with the operations of Napoleon III., in 1859.

Cagliari is the chief place on the island of Sardinia, and is situated near its southern extremity.

2—GRAND-DUCHY OF TUSCANY.

TUSCANY includes part of the western side of the Italian peninsula, between the Apennines and the sea. Its capital, *Florence*, is beautifully situated in the valley of the river Arno, and is famous for its rich collections of works of art.

Among the other cities of Tuscany are Leghorn, Pisa, Lucca, and Sienna. *Leghorn* (or Livorno), on the coast, is one of the most commercial cities of Italy. *Pisa* is on the river Arno.

3—AUSTRIAN ITALY.

The Austrian possessions in Italy are now limited to the territory of Venetia, which embraces the extreme north-eastern portion of the country, from the Adriatic to the Alps. The river Po forms the southern frontier of Venetia. On the west, it reaches to the lake of Garda and the Sardinian border.

The chief cities of Austrian Italy are Venice, Verona, Padua, Vicenza, and Mantua.

Venice stands on the shore of the Adriatic, in the midst of lagoons, in a situation well suited for commanding, as it did in former ages, the commerce of the neighbouring waters. Venice long divided with Genoa the trade of the Mediterranean, and exercised sovereignty over distant lands. Though now only a provincial city, its trade is yet considerable. Canals divide the different quarters of Venice.

Verona, to the west of Venice, on the river Adige, is a great commercial city, as well as a strong fortress. *Padua* and *Vicenza* lie between Venice and Verona. *Mantua*, the birth-place of Virgil, is on the stream of the Mincio.

4.—STATES OF THE CHURCH, OR ECCLESIASTICAL TERRITORY.

The territory known as the "States of the Church," and under the temporal sway of the Pope, stretches across the Italian peninsula, from the Adriatic to the Mediterranean coast. Its capital is Rome, the central seat of the Roman Catholic Church, and the former mistress of the world.

Rome stands beside the river Tiber, sixteen miles above its mouth. It is the centre of attraction in Italy, alike by its remains of classical antiquity and its unrivalled works of mediæval art. The Coliseum, among the former class, and the magnificent cathedral of St Peter's, of the later era, are most conspicuous.

Civita Vecchia, on the Mediterranean coast, to the north-west of Rome, serves as the port of that city. Among the other towns within the Papal territory are Bologna, Ancona, Ferrara, Perugia, Rimini, Ravenna, and San Marino—all of them situated to the east of the Apennines. *Bologna* is the largest and most important of the number. *Ancona* is a flourishing port on the Adriatic coast.

The little town of SAN MARINO, situated in the plain to the east of the Apennines, nearly midway between Bologna and Ancona, with a population of about 8000, ranks as a sovereign republic.

5.—KINGDOM OF NAPLES AND SICILY.

The Kingdom of Naples and Sicily includes more than a third part of Italy, and above a third of its population. Its inhabitants number upwards of 9,000,000, which is a greater population than that of any other Italian State.

The chief cities of this portion of Italy are Naples, situated on the Italian mainland; Palermo and Messina, on the island of Sicily.

Naples, the capital of the kingdom, is the largest city of Italy, and has upwards of 400,000 inhabitants. It lies on the shore of the beautiful Bay of Naples, only a few miles distant from the foot of Mount Vesuvius. The disinterred city of Pompeii, buried nearly eighteen centuries since under the ashes ejected from the mountain, is on the shore of the bay.

The other towns on the mainland of Naples are all of greatly inferior size to the capital. Among them are Foggia,

Bari, Salerno, Gaeta, Capua, Taranto (the ancient Tarentum), and Brindisi (anc. Brundisium). *Gaeta* and *Salerno* are on the Mediterranean coast; *Bari* and *Brindisi* on the Adriatic shore, and *Taranto* at the head of the gulf called by its name. *Foggia* and *Capua* are inland.

Palermo, the largest city of Sicily, is on the north coast of the island. *Messina* is at its eastern extremity, beside the strait which bears its name. Among the other towns of Sicily are Catania, Trapani, Marsala, and Siragusa. *Catania* lies at the foot of Mount Etna, on the east coast; *Siragusa* (the ancient Syracuse) is on the same coast, to the southward. *Trapani* and *Marsala* are seaports at the western extremity of the island.

The Duchy of **PARMA** embraces a small territory in the north of Italy, between the Po and the chain of the Apennines. Its chief town is *Parma*, which stands on a river of the same name, a tributary of the Po. *Placentia* (or *Piacenza*), on the south bank of the Po, is within the Duchy.

The Duchy of **MODENA** lies immediately east of Parma, and, like that territory, extends between the river Po and the Apennines. Its chief town is *Modena*.

GOVERNMENT, &c.—The present political condition of Italy exhibits a state of transition. The Italian war of 1859 has resulted in the transfer of Lombardy from Austrian to Sardinian rule, and may perhaps involve other changes. Among the Italian States, Sardinia alone enjoys a free constitution. The Austrian provinces, the Papal Territory, and the Kingdom of Naples, are the worst governed portions of Italy, the latter, especially, exhibiting the spectacle of a cruel and ignorant despotism. In religion, the Italians are uniformly followers of the Church of Rome.

The island of **MALTA**, with the two smaller adjacent islands of Gozo and Cumino, belongs to Britain. Malta has upwards of 140,000 inhabitants. Its chief town is *Valetta*, a busy seat of trade, and an important naval station. Malta has belonged to England since the year 1800.

QUESTIONS ON ITALY.

1. How is Italy bounded? To what may its shape be likened?
2. Name the gulfs, bays, and straits, which belong to the Italian coasts, and point them out upon the map.
3. Where are Cape Spartivento, Cape Di Leuca, the Lipari Islands, Elba, and Malta? Point to each on the map.
4. What mountains belong to Italy? Which among them are active volcanoes, and where are they situated?
5. Name the chief rivers of Italy, and trace their courses on the map.
6. Enumerate the principallakes. Which of the number belong to the Alpine region?
7. What kind of climate has Italy? What parts of the country exhibit an exception to its general attributes in this regard?
8. Mention some of the chief productions of Italy, in the vegetable and mineral kingdoms.
9. For what articles of industrial produce is Italy chiefly noted? Which portion of the country is especially distinguished for its silk?
10. Into what States is Italy politically divided? Point out their places on the map.
11. What cities are the capitals, respectively, of Austrian Italy, Sardinia, Tuscany, and the Papal Territory?
12. Point to the following upon the map:—Venice, Genoa, Nice, Leghorn, Civita Vecchia, and Ancona?
13. On what rivers are Pavia, Mantua, Turin, Florence, Pisa, and Rome?
14. Where is Savoy? To which of the Italian States does it belong, and what is the name of its chief city?
15. In what parts of Italy are Bologna, Ravenna, Ferrara, San Marino, Taranto, and Brindisi?
16. What city forms the capital of the Kingdom of Naples and Sicily? How is it situated?
17. In what part of Naples and Sicily are Gaeta, Salerno, Messina, Catania, Siragusa, and Marsala?
18. What are the respective capitals of the Duchies of Parma and Modena? Point them out on the map.
19. To what nation does Malta belong? What is its chief town called?
20. What is the general character of the Italian governments, and which among its States forms an exception in this respect?

SPAIN

SITUATION, &c.—Spain is an extensive country in the south-west of Europe. It includes the greater part of a peninsula which lies between the Mediterranean Sea, the Atlantic Ocean, and the Bay of Biscay. The western and smaller portion of this peninsula forms the Kingdom of Portugal.

Spain is bounded on the north by France and the Bay of Biscay; on the west by the Atlantic Ocean and the Kingdom of Portugal; on the south-west by the Atlantic; on the south and east by the Mediterranean Sea. In point of size, Spain is

above three times larger than England and Wales, and nearly as large as France—its area being not much less than 200,000 square miles.

COASTS.—The coast-line of Spain is extensive, including portions both of the Atlantic and the Mediterranean shores. It is, however, much less varied than the coasts of Italy or Greece, and the Spanish peninsula has a more solid shape than belongs to either of those countries. The external contour of the land is less indented, and its central parts are consequently further removed from the sea than is the case with either the Italian or the Grecian peninsulas. The Strait of Gibraltar, which connects the Atlantic with the Mediterranean, washes the extreme southern coast of Spain.

CAVES.—The principal are Ortegal, Finisterre, Trafalgar, Tarifa, Europa Point, and Cape Creuse.

Capes Ortegal and Finisterre are both upon the north-west coast of Spain, on the side of the Atlantic. Cape Tarifa is on the north side of the Strait of Gibraltar, and is the most southwardly point of the European continent: Cape Trafalgar is a short distance to the north-west of Cape Tarifa, on the Atlantic coast: Europa Point is to the east of Cape Tarifa: Cape Creuse is on the Mediterranean coast, at the eastern extremity of the Pyrenees.

ISLANDS.—These are—Majorca, Minorca, Ivisa, and Formentera, situated in the Mediterranean Sea, and together called the Balearic Islands.

The Canary Islands, situated in the Atlantic Ocean, off the coast of Africa, also belong to Spain, and form one of the modern provinces into which the kingdom has been divided.

MOUNTAINS.—Spain is crossed by several mountain-chains, which stretch through the country in the direction of east and west. These are—the Pyrenees, the Cantabrian Mountains, the Mountains of Castile, the Mountains of Toledo, the Sierra Morena, and the Sierra Nevada.

The Pyrenees are on the border of France and Spain. They are the highest of the Spanish mountains, reaching upwards of 11,000 feet. The Cantabrian Mountains extend westward from the Pyrenees along the shores of the Bay of Biscay, and terminate in Cape Finisterre.

The Sierra Nevada is in the south of Spain, near the Mediterranean coast. The highest peaks of this chain nearly rival the Pyrenees in altitude, and, like those mountains, are covered with unmelting snow.

The chains of the Castilian Mountains, the Mountains of Toledo, and the Sierra Morena, are in the interior of Spain. Their direction is best marked out on the map by observing the different river-basins which they divide. Thus, the Mountains of Castile separate the basins of the Douro and the Tagus: the Mountains of Toledo divide the Tagus and the Guadiana: the Sierra Morena intervenes between the Guadiana and the Guadalquivir.

The interior of Spain, from the Cantabrian Mountains to the chain of the Sierra Morena, forms a high table-land, which has an elevation of 2000 feet above the sea. Many parts of this table-land have an arid surface.

RIVERS.—The rivers of the Spanish peninsula have the same general direction as its mountain-chains—that is, east and west. They are—the Minho, Douro, Tagus, Guadiana, and Guadalquivir, all of which flow west, and discharge into the Atlantic; with the Ebro, Xucar, and Segura, which have eastwardly courses, and enter the Mediterranean.

CLIMATE AND PRODUCTIONS.—The climate of Spain exhibits great varieties. The north is temperate: the middle parts are liable to great extremes of heat and cold—parched in summer by intense heat, and piercingly cold in winter: the south and south-east are hot, like the countries of southern Europe in general.

The extremes of temperature which belong to central Spain result from its elevated and exposed character. Madrid, which stands at an elevation of 2000 feet above the sea, is at once among the hottest and the coldest localities in Europe. In many parts of the interior plateau, the rains are scanty and irregular.

The vegetation is equally various as the climate. In the north, upon the shores of the Bay of Biscay, the fruits common to the south of England flourish. In the south and south-east, along the Mediterranean coasts, the foliage is ever-green, and the fruits are such as belong to southern lands. The orange, lemon, citron, and fig, are here abundant; the sugar-cane thrives, and the rich foliage of the banana and other tropical fruits is seen beside the groves of myrtle, oleander, and Indian fig.

The mineral wealth of Spain is very great. The quicksilver mines of Almaden (on the north slope of the Sierra Morena) are among the richest in the world. The lead mines are also of great value. Silver, iron, copper, zinc, and tin, occur in

various parts of Spain, and valuable marbles and building-stones abound.

POPULATION AND INDUSTRY.—Spain is one of the least populous among European countries. It has fewer than 16,000,000 of inhabitants—a smaller ratio than that of many other countries which are inferior in natural wealth.

The pursuits of industry are not generally flourishing in Spain, which country exhibits, in nearly every regard, a great decline from its condition at a former period. Agriculture is less an object of national pursuit than the rearing of sheep, immense numbers of which are bred upon the extensive pasture-grounds of the interior. The silk manufacture has flourished of late at Valencia and other places on the Mediterranean coasts. Some woollen and linen fabrics are also made, and leather is extensively prepared. Spain, however, is not generally a manufacturing country.

The chief articles of produce which Spain exchanges for the manufactures of other lands are wines, fruits (raisins, oranges, figs, &c.), wool, salt, barilla, quicksilver, lead, and cobalt; with leather, olive-oil, and cork-wood. The foreign trade carried on both with France and England is considerable. The sherry-wines so largely consumed in the latter country are the produce of the south-west of Spain, in the vicinity of Cadiz.

DIVISIONS AND TOWNS.—The most recent division of Spain is into forty-nine provinces. But the older division into thirteen provinces—some of them formerly separate kingdoms—is more generally followed; and (as in the like case of the earlier divisions of France) the names of these provinces are inseparably mixed up with the historic records of the country.

The thirteen older provinces of Spain, with the chief towns in each, are as follow :—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
NEW CASTILE.....	Madrid, Toledo, Ciudad-Real.	MURCIA.....	Murcia, Cartagena.
OLD CASTILE.....	Burgos, Santander.	VALENCIA.....	Valencia, Alicante.
LEON.....	Valladolid, Salamanca, Ciudad-Rodrigo.	CATALONIA.....	Barcelona, Tarragona.
ESTREMADURA	Badajoz.	ARAGON.....	Saragossa.
ANDALUSIA.....	Seville, Malaga, Granada, Cordova, Cadix, Xeres, San Lucar.	NAVARRA.....	Pamplona.
		BISCAY.....	Bilbao, St Sebastian.
		ASTURIAS.....	Oviedo.
		GALICIA.....	Corunna, Santiago, Ferrol, Vigo.

MADRID, the capital of Spain, lies in the centre of the king-

dom, beside the stream of the Manzanares, a tributary of the Tagus, and in the midst of an arid plain, which is upwards of 2000 feet above the level of the sea. The royal palace of the Escorial, built by Philip II., is to the north-west of the capital, at the foot of the Mountains of Castile. *Toledo*, an ancient city to the south-west of Madrid, is on the Tagus. *Talavera*, also on the Tagus, lower down its stream, is famous for the victory gained in 1809 by the British over the French army.

Burgos, the capital of Old Castile, is on the Arlanzon, one of the small tributaries of the Douro. *Santander* is a port on the Bay of Biscay.

Valladolid, the chief city of Leon, and the former capital of the Spanish monarchy, is within the valley of the Douro, at the junction of two of the smaller affluents of that river. *Salamanca*, once famous for its university, is on the river Tormes, which joins the Douro. *Ciudad-Rodrigo* is to the south-west, near the Portuguese frontier. *Badajoz*, the chief city and fortress of Estremadura, is on the Guadiana, and closely adjoins the border-line between Spain and Portugal.

Andalusia, the southwardly division of Spain, includes a greater number of large cities than any other portion of the kingdom. It was here that the Moors longest maintained their ground against the advancing tide of Christian warfare and conquest. Cordova, Seville, Granada, and Jaen, among the cities of Andalusia, were formerly the capitals of Moorish kingdoms; and the architectural glories of the Alhambra yet tell of the splendours amidst which the Moorish kings of Granada maintained their court.

Seville, now chiefly noted for its extensive trade in oranges, stands beside the river Guadalquivir. At the mouth of that stream is *San Lucar*, the port whence (in 1519) Magellan sailed on the first voyage of circumnavigation round the globe. *Palos*, a small port to the westward, at the mouth of the little river Tinto, is yet more noteworthy in the annals of discovery: Columbus sailed thence, in 1492, on the great voyage in which he discovered the New World.

Cadiz, one of the chief seaports of Spain, is at the north extremity of an island which immediately adjoins the Spanish coast. The town of *Xeres* (whence the name of sherry is derived) is in the midst of the wine district, to the north-east of Cadiz. The name of Cape Trafalgar, to the south-east of Cadiz, recalls the memory of Nelson's great victory in 1805.

Cordova, greatly decayed from its former splendour, is on the Guadalquivir, in the middle portion of its course. *Granada* stands in a beautiful plain at the northern foot of the Sierra Nevada, beside the little stream of the Darro, which falls into the Xenil, one of the chief affluents of the Guadalquivir. *Malaga* is a flourishing port on the southern coast.

The town of *Murcia* is on the river Segura, on the eastern side of the kingdom: *Cartagena* is on the coast of the same province. *Alicant*, also on the Mediterranean coast, is to the northward. *Valencia*, still further north, is a short distance inland: it has flourishing silk manufactures and extensive trade.

Barcelona, situated on the coast of Catalonia, commands the Mediterranean trade of Spain, and is the second city of the kingdom in amount of population. *Saragossa*, the chief city of Aragon, on the river Ebro, is noteworthy for its memorable sieges in 1808-9, during the Peninsular war. *Pamplona*, in Navarre, is a strong fortress, not far distant from the Pyrenees. *St Sebastian*, a strongly-fortified port on the Bay of Biscay, near the French border, was stormed by the British in 1813, after a memorable siege.

Santiago, the chief city of Galicia, like many other of the cities of Spain, has greatly decayed from its former importance. *Corunna* and *Ferrol*, on the coast of this province, are at the opposite extremities of an extensive bay: but *Vigo*, on a fine bay further south, has of late outstripped them in commercial importance.

GIBRALTAR, in the extreme south of Spain, is a possession of the British Crown. It was captured by an English squadron in 1704, and has ever since been retained in British possession.

The town of Gibraltar occupies the western declivity and base of a lofty rock, which advances a length of four miles into the sea, and terminates to the southward in Europa Point. A narrow and sandy isthmus connects this rock with the mainland of Spain. The natural strength of Gibraltar is increased by extensive fortifications, and a numerous garrison is maintained there. The position of Gibraltar, at the entrance of the Mediterranean, renders it of great importance as a naval station.

GOVERNMENT, &c.—The present government of Spain has the form of an hereditary and limited monarchy. The country has declined, in nearly every respect, from the more flourishing condition which it formerly bore ; but considerable improvements, social and political, have been made within a recent period. The Spanish people are uniformly followers of the Church of Rome.

COLONIES.—The present colonial possessions of Spain are but a small fragment of those which she formerly owned. They comprehend, besides the Canary Islands (now regarded as an integral portion of the kingdom), the islands of Cuba and Porto Rico, in the West Indies ; the Philippine Islands, in the East Indies, and the Ladrone or Marianne Islands, in the Pacific Ocean. Ceuta, on the African coast, opposite Gibraltar, also belongs to Spain, with a few other small stations on the same line of coast, further to the east.

The fortress of Ceuta stands at the foot of a high rock, which rivals that of Gibraltar in point of natural strength. The distance between the two is sixteen miles. The rocks of Gibraltar and Ceuta (the *Calpe* and *Abjla* of classic geography) were the " Pillars of Hercules " of the ancients.

PORTUGAL.

SITUATION, &c.—Portugal is a small country in the south-west of Europe. It lies on the western side of the Spanish peninsula. It is bounded on the north and the east by Spain ; upon the south and the west by the Atlantic Ocean.

Portugal has an area of 35,000 square miles, dimensions which do not greatly exceed those of Ireland. It is less than one-fifth the size of Spain.

COASTS.—The coast-line of Portugal belongs wholly to the Atlantic. It includes two fine bays—the Bay of Lisbon (formed by the estuary of the Tagus), and the Bay of Setubal.

CAVES.—The principal are Cape Roca and Cape St Vincent. Cape Roca is the most westerly point of the European continent : Cape St Vincent is its south-west point.

MOUNTAINS.—The surface of Portugal is highly diversified. Its mountains consist of portions of the long chains which cross the Spanish peninsula from east to west, and

terminate in the latter direction on the shores of the Atlantic. The highest elevations of Portugal are found in the Sierra d'Estrella, between the basins of the rivers Tagus and Mondego.

RIVERS.—The principal rivers of Portugal are the Minho, Douro, Mondego, Tagus, and Guadiana, all flowing into the Atlantic. Only one of the number—the Mondego—is wholly Portuguese. The four others have the larger portion of their courses in Spain. The Minho forms part of the northern frontier of Portugal: the Douro, Tagus, and Guadiana, form portions of its eastern boundary.

CLIMATE AND PRODUCTIONS.—The climate of Portugal is warm and equable. This latter quality is due to its maritime position. Lisbon, its capital, exhibits remarkably little variation of temperature throughout the year.

The natural productions of Portugal (in the vegetable kingdom) resemble those of the south and south-east coasts of Spain. The vine and the olive—the orange, lemon, citron, almond, and fig—the myrtle and the cork-tree, abound. The mineral resources of the country comprehend copper, lead, and numerous other metals, very few of them, however, being worked.

POPULATION AND INDUSTRY.—Portugal has three and a half millions of inhabitants. Every branch of industry is in a backward condition, and the abundant natural resources which the country possesses are turned to comparatively little account. The most important branches of labour are in connexion with the wine-trade. The port-wines so largely consumed in England and elsewhere are derived from Oporto, at the mouth of the Douro, and are the produce of the wine-district of the Alto-Douro—that is, the upper portion of the river, within the Portuguese frontier. Portugal has few manufactures. Her foreign trade consists chiefly in the export of wines, with lemons, almonds, and other fruits.

DIVISIONS AND TOWNS.—Portugal includes the following six provinces :—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
ESTREMADURA	Lisbon, Setubal, Santarem.	TRAS OS MONTES.....	Ville Real.
ALENTEJO	Evora, Elvas.	ENTRE DOURO E MINHO	Oporto.
BEIRA	Coimbra.	ALGARVE	Faro.

LISBON, the capital of Portugal, stands on the north side of the Tagus, upon the estuary which that river forms at its

entrance into the sea. The mouth of the Tagus forms one of the finest of natural harbours. *Oporto*, the second city in the kingdom, is situated on the Douro, a short distance above its mouth.

Lisbon and Oporto are the only two great cities which Portugal contains, and divide between them nearly the whole of its commerce. Oporto is the chief seat of the wine-trade, Lisbon that of the more general foreign trade.

Coimbra and Setubal come next in order of size. *Coimbra*, which is on the river Mondego (nearly midway between Oporto and Lisbon), is the seat of the only Portuguese university. *Setubal* (or St Ubes) is situated on a bay called by its name, to the south-east of Lisbon. Its chief trade consists in the export of salt, derived by evaporation from the adjacent shores. Vimiera, the scene of a victory gained by the English in 1808, is a small town to the northward of Lisbon, and Torres Vedras—rendered famous by the well-known lines of defence constructed by Wellington, in 1810—is in the same direction, nearer to the capital. Cape St Vincent, in the south-west of Portugal, gives its name to the naval victory gained by the English, in 1797.

GOVERNMENT, &c.—The Kingdom of Portugal is an hereditary and limited monarchy. The Roman Catholic religion is uniformly followed.

COLONIES.—The foreign possessions of Portugal—much less extensive now than at a former period—comprehend the Azores or Western Islands, Madeira, the Cape Verde Islands; Angola and Benguela, on the west coast of Africa, with St Thomas and Prince's Islands (in the Gulf of Guinea); Mozambique and other territories on the east side of the African continent; together with Goa (on the coast of India), Macao (in China), and part of the island of Timor, in the East Indies.

The Azores are situated in the Atlantic Ocean, due west from the coast of Portugal, and are reckoned to belong to this division of the globe, though too far distant from the shores of the mainland to be shown upon the maps of Europe. They consist of a group of nine islands, the largest of which is named St Michael, and the next in size Terceira. The island of St Michael furnishes great numbers of oranges, which (with some corn) are the chief articles of export. The town of Angra, on Terceira, is the capital of the group.

QUESTIONS ON SPAIN AND PORTUGAL.

1. How is Spain bounded; and what is its size as compared with that of England and Wales?
2. In what particular does the coast-line of Spain differ from that of the Italian or the Grecian peninsulas?
3. Name the principal capes of Spain. Point to them on the map.
4. What islands in the Mediterranean Sea belong to Spain? Which is the largest among them?
5. Name the mountain-chains by which Spain is crossed from east to west. Which of them are highest?
6. What kind of country (as to physical features) does the interior of the Spanish peninsula form?
7. Enumerate the principal rivers of Spain. Which among them flow into the Atlantic, and which into the Mediterranean?
8. By what is the climate of Spain chiefly characterised?
9. What productions of the vegetable kingdom belong to the southern and eastern shores of Spain?
10. What minerals does Spain possess? Which among them is furnished by the mines of Almaden, and where is that place?
11. What branches of industry chiefly distinguish Spain?
12. Name the thirteen provinces into which Spain is historically divided.
13. Which of these provinces is most to the southward? Which in the north-west angle of the peninsula? Which in the north-east? Which two in the central parts of the kingdom?
14. In which of the provinces are the following towns:—Madrid, Burgos, Valladolid, Seville, Cadiz, Cartagena, and Alicante?
15. In which provinces are Badajoz, Saragossa, Pamplona, Oviedo, Cerunna, and Santiago?
16. Upon what rivers are the following towns situated:—Madrid, Toledo, Badajoz, Cordova, Saragossa, and Granada?
17. Upon what portions of the Spanish coasts are Cadiz, Malaga, Cartagena, Barcelona, St Sebastian, Ferrol, and Vigo?
18. For what are Talavera, Badajoz, Saragossa, and St Sebastian, historically noteworthy?
19. By what events have the ports of Palos and San Lucar been distinguished? In what part of Spain are they situated?
20. In what part of Spain is Gibraltar? What are the peculiarities of its situation (as to natural features), and to what nation does it belong?
21. What foreign possessions belong to Spain?
22. How is Portugal bounded? What is its size as compared with that of Spain?
23. Name the rivers of Portugal? Which of the number has its course entirely within that country?
24. What kind of climate has Portugal? What fruits are among its productions?
25. What branch of industry is most important in Portugal? In what does its foreign trade chiefly consist?
26. In which of the provinces of Portugal are Lisbon and Oporto respectively situated? On what rivers are they?
27. Where are Coimbra and Setubal? What article of commerce does Setubal furnish?
28. For what are the localities of Vimiera, Torres Vedras, and Cape St Vincent, noteworthy? In what part of Portugal are they?
29. What foreign possessions belong to Portugal?
30. Under what form of government are Spain and Portugal? What religion is uniformly followed in each?

ASIA.

ASIA is largest among the divisions of the globe. It is the most eastwardly of the three continents which constitute the Old World. The continent of Asia falls entirely within the northern hemisphere, but some of the adjacent islands extend to the south of the equator.

BOUNDARIES AND EXTENT.—Asia is bounded on the north by the Arctic Ocean; on the east by the Pacific Ocean; on the south by the Indian Ocean; on the west by the Red Sea, the Mediterranean Sea, the Black Sea, Mount Caucasus, the Caspian Sea, the river Ural, and the Ural Mountains.

To the northward of Mount Caucasus and the Caspian Sea, Asia and Europe constitute one continuous expanse of land, with only the course of the river Ural and the slight elevations of the Ural Mountains to mark the division between them. Asia is joined to Africa by the Isthmus of Suez, which divides the Mediterranean and the Red Seas.

Asia measures more than 5000 miles across in the direction of east and west, and about 4000 miles in its average dimensions from north to south. Its area is equal to 17,500,000 square English miles, so that it is nearly five times larger than Europe. It embraces more than a third part of all the land upon the surface of the globe.

In shape, Asia is less irregular, and more solid, than Europe. Its vast interior exhibits an immense expanse of land, far removed from contact with the ocean. But its external portions, both on the east and the south, are indented by arms of the sea.

SEAS, GULFS, AND BAYS.—The Arctic Ocean, on the north side of Asia, has two considerable gulfs—the Gulf of Obi, and the Gulf of Yenesei.

The Pacific Ocean, which washes the eastern shores of Asia, has the following arms :—the Sea of Kamchatka, the Sea of Okotsk, the Japan Sea, the Yellow Sea, and the China Sea. These are not inland seas, in the strict meaning of the term, but they are divided from the open ocean by chains of islands and advancing peninsulas. They are therefore in great measure land-enclosed, though connected with the ocean by numerous channels. The northern part of the Japan Sea is called the Gulf of Tartary.

The Indian Ocean, on the south of Asia, divides into the Bay of Bengal and the Arabian Sea: the former is on the east side of the peninsula of India proper, the latter on its western side. The Red Sea and the Persian Gulf, which are two inland seas, are likewise arms of the Indian Ocean.

The seas which wash the shores of Asia are recapitulated below :—

Belonging to the Arctic Ocean.

Gulf of Obi.
Gulf of Yenesei.

Belonging to the Indian Ocean.

Bay of Bengal.
Arabian Sea.
Red Sea.
Persian Gulf.

Belonging to the Pacific Ocean.

Sea of Kamchatka.
Sea of Okotak.
Japan Sea.
Gulf of Tartary.
Yellow Sea.
China Sea.

STRAITS.—The most important straits of Asia are the five following :—

Strait of Bab-el-Mandeb, forming the entrance to the Red Sea.
Strait of Ormuz, forming the entrance to the Persian Gulf.
Strait of Malacca, forming one entrance to the China Sea.
Strait of Sunda, forming another entrance to the China Sea.
Behring Strait, between Asia and North America.

Besides these, there are the Dardanelles and the Channel of Constantinople, which are European as well as Asiatic.

The broader channel which extends between the Strait of Bab-el-Mandeb and the Indian Ocean is called the Gulf of Aden, and the similar channel which leads to the Strait of Ormuz is called the Gulf of Omaun.

CAVES.—The principal are—the North Cape, East Cape

Cape Lopatka, Cape Romania, Cape Comorin, Cape Al-Had, Cape Carmel, and Cape Baba.

The North Cape of Asia is the most northerly point of that continent, and approaches within less than twelve degrees of the pole. Cape Romania is the most southerly point, and is little more than one degree distant from the equator: East Cape is the most easterly point, and Cape Baba (in Asia Minor) is the most westerly.

PENINSULAS.—The following peninsulas belong to Asia :—Kamchatka, Corea, India beyond the Ganges (or the Indo-Chinese Peninsula), India proper, Arabia, and Asia Minor. The two first-mentioned are in the east, the three following in the south, and Asia Minor in the west. The most southwardly portion of the Indo-Chinese peninsula forms the narrow peninsula of Malaya.

The Asiatic peninsulas, though considerable in size, yet bear a much smaller proportion to the entire extent of Asia than the peninsular portions of Europe do to the whole of the European continent. They leave the great central mass of Asia in unbroken solidity. In Asia, the peninsulas merely fill the place of external members to the general framework of the continent: in Europe, they constitute the most important features of the continent itself. This difference is highly important.

ISTHMUSES.—The Isthmus of Suez, which connects Asia with Africa, is the most important, and is one of the two principal isthmuses of the globe.* It is about seventy miles across. The Isthmus of Krah unites the Malay peninsula to the mainland.

ISLANDS.—*In the Arctic Ocean*—the Liakhov Islands.

In the Pacific Ocean—the Aleutian Islands, Kurile Islands, Sagalien, Japan Islands, Loo-choo Islands, Formosa, Hainan, and the Philippine Islands. The last-named group of islands forms a portion of an extensive region known as the East Indian Archipelago, which lies between the waters of the Pacific and Indian Oceans, bordering upon each.

The East Indian Archipelago embraces, besides the Philippine Islands, the large islands of Borneo, Sumatra, Java, and Celebes, with the group of the Moluccas, and a long chain of

* The other is the Isthmus of Panama, which unites North and South America.

smaller islands, which stretch to the eastward of Java, and are known as the Lesser Sunda Islands.*

Borneo is the largest island in the East Indies, and (regarding Australia as a continent) the largest island in the world.

In the Indian Ocean—Ceylon, the Andaman Islands, Nicobar Islands, Laccadive Islands, and Maldivé Islands.

In the Mediterranean Sea—Cyprus, with Rhodes, Kos, Samo, Mytilene, and several of the small islands of the Archipelago.

EXAMINATION QUESTIONS.

1. In what position is Asia with respect to the other divisions of the Old World?
2. By what oceans is Asia bounded on the north, east, and south?
3. What are the dimensions of Asia, in the direction of east and west, and also in that of north and south?
4. How many square miles of surface does Asia embrace? What proportion does this bear to the whole extent of the land upon the globe?
5. What characterises the shape of the Asiatic continent, as compared with that of Europe?
6. What two gulfs does the Arctic Ocean, on the north of Asia, form? Point them out upon the map.
7. What seas occur upon the east side of Asia? Of what ocean do they form portions?
8. What two great arms has the Indian Ocean, to the south of Asia?
9. What two inland seas belong to Asia? Which is the larger of the two?
10. Point on the map to the following:—the Gulf of Obi, the Sea of Okotak, the Gulf of Tartary, the China Sea, and the Bay of Bengal.
11. Name the five principal straits of Asia, and point to their places on the map.
12. What strait forms the entrance to the Red Sea? What to the Persian Gulf?
13. What two straits lead from the Indian Ocean into the China Sea?
14. What strait divides Asia from North America?
15. Where are the channels called the Gulf of Aden and the Gulf of Omaun? Point them out upon the map.
16. Name the principal capes of Asia, and find out their places on the map.
17. How near does the most northerly cape of Asia approach to the pole?
18. Which is the most southerly point of Asia, and how near is it to the equator?
19. Asia has six considerable peninsulas. Name them, pointing to their places on the map.
20. Which two of the Asiatic peninsulas are on the east side of Asia?
21. Which three peninsulas are in the south of Asia?
22. What peninsula is in the west of Asia? By what seas is it washed on the north and south?
23. What smaller peninsula forms the southwardly portion of India beyond the Ganges?
24. In what respect do the peninsulas of Asia differ (in their relation to the entire mass of the Asiatic continent) from those of Europe?

* Sumatra and Java are together called the Greater Sunda Islands.

25. What isthmus joins Asia to Africa? How many miles is it across?
26. What isthmus joins the Malay peninsula to the mainland?
27. What group of islands is situated to the north of Asia? In what ocean are they?
28. What islands lie off the east coasts of Asia?
29. Of what archipelago do the Philippine Islands form a portion?
30. What islands (besides the Philippines) are included within the East Indian Archipelago? Which is largest amongst them?
31. What islands are to the southward of Asia, in the Indian Ocean? Which is the largest of the number?
32. What islands are to the west of Asia? In what sea are they situated?
33. Point on the map to the following:—Japan, the Kurile Islands, Formosa, Sumatra, Ceylon, the Andaman Islands, the Maldivé Islands, and Cyprus.

HIGHLANDS AND MOUNTAINS.—The mountains of Asia are the highest in the world; but they are, notwithstanding, of inferior importance to the vast and elevated masses of table-land which belong to this continent. The mountain-chains of Asia generally mark the outer borders of the high interior plateaus. Hence their slope, or descent, is much greater upon one side than upon the other, and the apparent altitude of the chain is different according as it is viewed from the grounds which form its base in opposite directions.

The principal table-lands, or highlands, of Asia are the following:—

- | | | |
|-----------------|---------------------|----------------|
| 1. Tibet. | 4. Iran, or Persia. | 7. The Deccan. |
| 2. Mongolia. | 5. Armenia. | 8. Arabia. |
| 3. Afghanistan. | 6. Asia Minor. | |

The places of these will be readily found upon the map. Tibet and Mongolia (it will be seen) occupy the interior and most central regions of the Asiatic continent, far distant from any of the oceans by which the shores of Asia are washed. Afghanistan, Persia (Iran), Armenia, and Asia Minor, stretch in succession from the north-western borders of India to the shores of the Mediterranean and Black Seas. The Deccan embraces the interior of central and southern India. The Arabian plateau comprises all the interior of the large peninsula of Arabia.

These regions are of various heights, ranging between 2500 and 16,000 feet above the level of the sea; but they all lie at much greater elevations than other parts of the continent, and most of the rivers of Asia have their origin in the mountain-chains which form their external borders. The most elevated of the number is Tibet, the plains of which are

at the astonishing altitude of 16,000 feet (or upwards of three miles) above the sea. Tibet is hence, comparatively to its latitude, a cold country.

The mountains of Asia lie principally in the direction of east and west, and they form, in most instances, the borders of the table-lands. Some of them, however, have an opposite direction, running from north to south.

The principal mountain-chains of Asia lying in the direction of east and west are—

Himalaya Mountains.....	between India and Tibet.
Kuen-luen	between Tibet and Chinese Turkestan.
Thian-shan (Celestial Mountains).....	through Chinese Turkestan and Mongolia.
Altai Mountains	between Mongolia and Siberia.
Hindoo-Koosh.....	between Afghanistan and Turkestan.
Mountains of Armenia	on the plateau of Armenia (Asiatic Turkey and Russia).
Mount Taurus	in Asia Minor.
Vindhya Mountains	in India, on the northern border of the Deccan.

The principal chains that lie in the direction of north and south are—

The Ghauts, on the eastern and western coasts of India.
Mountains of Lebanon, on the coast of Syria, bordering the Mediterranean.

The highest of these chains is the Himalaya, all the upper portions of which rise above the line of perpetual snow, and the principal peaks of which exceed 20,000 feet in altitude. The most elevated of the Himalaya peaks is Mount Everest, which reaches 29,000 feet above the sea, and is the highest known mountain on the globe. This is a stupendous elevation, amounting to more than five miles in perpendicular height, and nearly double that of Mont Blanc, the highest summit of the Alps. Yet, great as it is compared with man, or the works of man, it is trifling as compared with the entire magnitude of the globe.* Many other of the peaks of the Himalaya nearly rival Mount Everest in height.

The mountains called Hindoo-Koosh adjoin the western extremity of the Himalaya, and reach nearly 20,000 feet in altitude. They form part of a vast mountain-knot, or centre of elevation, whence various elevated chains and ridges diverge, and form a connecting link between the highlands of central

* The height of Mount Everest is equal to about one *fteen-hundredth* part of the length of the earth's diameter, and would be represented on the largest of our artificial globes by a minute grain of sand. So little do the loftiest elevations on the earth's surface detract from the sphericity of the entire mass of the globe.

Asia and those that belong to the more westerly division of the continent.

The Altai Mountains are much less elevated, their height not generally exceeding from five to seven thousand feet ; but they form part of a continuous succession of high grounds which stretch to the easternmost extremity of the Asiatic continent.

The chains of the Kuen-luen and Thian-shan stretch through the plains of central Asia, across the country which intervenes between the Himalaya and the Altai systems. They rise above the snow-line, the summits of the former reaching 20,000 feet.

The highest among the Mountains of Armenia is Mount Ararat (17,260 feet), which tradition indicates as the resting-place of the ark, on the subsidence of the Deluge. It is within the Russian territory, but near the borders of Asiatic Turkey and Persia. The chain of Mount Taurus extends along the south coast of the peninsula of Asia Minor, and is from four to five thousand feet in average height.

The Mountains of Lebanon stretch, in a double chain, along the coast of Syria, bordering the eastern Mediterranean. Their highest summit is Mount Hermon, which reaches about 10,000 feet above the sea.

The Ghauts, which extend along the western coast of the Indian peninsula, are from three to four thousand feet in average height, and attains double that altitude in their highest elevations. The Eastern Ghauts, on the opposite side of the peninsula, are less elevated.

PLAINS.—The interior regions of Asia are for the most part elevated: the lowland-plains occupy its outer borders, towards the sea. The names and localities of these plains are as follow :—

The Plain of Siberia	occupying all the north of Asia.
The Plain of Turkestan	embracing the country to the south and east of Lake Aral.
The Plain of China.....	in the north-east of China, along the Yellow Sea.
The Plain of Tonquin	in the north part of Anam, along the Gulf of Tonquin.
The Plain of Siam	at the head of the Gulf of Siam.
The Plain of Pegu	in India beyond the Ganges, to the southward of Burmah.
The Plain of Hindoostan.....	the northerly portion of India proper.
The Plain of Mesopotamia and } Babylonia	} in Asiatic Turkey.

DESERTS.—Asia contains some extensive deserts. They

stretch, in nearly continuous succession, from the most central regions of the interior to the shores of its south-western peninsula (Arabia), where they meet the waters of the Red Sea. Their names are as follow :—

Desert of Gobi, or Shamo	in Mongolia (Chinese Empire).
Indian Desert	in Hindoostan, or India proper.
Desert of Selstan.....	in Afghanistan.
Great Salt Desert.....	in Persia.
Syrian Desert	in the east of Syria (Asiatic Turkey).
Deserts of Arabia.....	in the interior of Arabia.

RIVERS.—The rivers of Asia are the largest in the Old World. Most of them derive their origin from the high table-lands and bordering mountains in the interior of the continent, and flow through the lowland-plains into the oceans by which Asia is bounded on the north, east, and south. Some of the rivers in the western part of Asia, however, flow either into the Caspian Sea or the Lake of Aral, and hence never reach the ocean ; and many of the smaller streams of the interior terminate in salt-water lakes, without any outlet. A large region of central Asia is thus limited to an inland drainage, and devoid of any natural outlet to the sea—a fact which has been productive of highly important consequences to the inhabitants of those regions, and has largely influenced the history of mankind.

The names of the chief rivers of Asia, arranged according to the oceans into which they flow, are as follow :—

<i>Into the Arctic Ocean.</i>		<i>Into the Indian Ocean.</i>	
Obi.....	flows through Siberia.	Saluen.....	flows through India beyond the Ganges.
Yenesel	do. Do.	Irawady.....	do. Do.
Lena	do. Do.	Brahmapootra	do. India proper.
<hr/>		Ganges.....	do. Do.
<i>Into the Pacific Ocean.</i>		Mahanuddy... ..	do. Do.
Amoor.....	do. Manchooria.	Godavery.....	do. Do.
Hwang-ho	do. China.	Krishna.....	do. Do.
Yang-tse	do. Do.	Cauvery.....	do. Do.
Choo-kiang, (or river of Canton)	} do. Do.	Tapti.....	do. Do.
Mekon		do. India beyond the Ganges.	Nerbudda.....
Menam.....	do. Do.	Indus.....	do. Do.
<hr/>		<hr/>	
<i>Into the Sea of Aral.</i>		<i>Into the Persian Gulf.</i>	
Syr, or Syhoon..	do. Turkestan.	Euphrates.....	} do. Asiatic Turkey.
Amoo, or Jyhoon	do. Do.	and Tigris...	
<hr/>		<hr/>	
<i>Into the Sea of Aral.</i>		<i>Into the Caspian Sea.</i>	
Syr, or Syhoon..	do. Turkestan.	Kour, and	} do. Armenia.
Amoo, or Jyhoon	do. Do.	Aras.....	

The longest of these is the Yang-tse-kiang, or great river

of China, which has a course of more than 3000 miles. The rivers of the Siberian plain—Obi, Yenesei, and Lena—come next in length of course, but they flow through a cold and barren region.

The three chief rivers of India—the Indus, Ganges, and Brahmapootra—have their sources either in the Himalaya Mountains or upon the adjoining high grounds.

The rivers of central and southern India derive their waters from the mountain-chains and high grounds of the Deccan. The sources of three among them—the Godavery, Krishna, and Cauvery—are found in the chain of the Ghauts, upon the western coast of India.

The sources of the rivers that flow through the peninsula of India-beyond-the-Ganges have not been visited, but they appear to come from a high region of mountains and table-lands which stretches to the eastward of the Himalaya.

The two great rivers of China—Yang-tze-kiang and Hwang-ho—originate on the plateau of Tibet.

Four great rivers derive their waters from the high grounds belonging to the Altai mountain-system: they are, the Obi, Yenesei, Lena, and Amoor.

Two considerable rivers—Amoo or Jyhoon, and Syr or Syhoon—originate in the high chains which branch off from the Hindoo-Koosh, at the western extremity of the Himalaya system.

Four considerable rivers have their sources on the plateau of Armenia: they are—the Euphrates and Tigris, and the Kour and Aras. It is remarkable that, in each case, the two rivers unite into a single stream before reaching the sea. The Euphrates and Tigris form, together, a double river-system; and the Kour and Aras do the same.

LAKES.—The two largest lakes of Asia (if we except the Caspian Sea, which is partly European) are Aral and Baikal. The former, which is so large as to be called a sea, is a short distance east of the Caspian, and is a body of salt water. Lake Baikal lies to the north of the Altai Mountains, and has fresh water.

Many of the lakes which are situated on the high interior plateaus in Tibet and Mongolia are without any outlet, and consist of salt water; but this is not the case with all of them. There are some large fresh-water lakes in China, adjoining the great rivers of that country.

In western Asia, three large lakes are found upon the

Armenian plateau. Two of the number, Lake Ooroomiyah and the Lake of Van, are salt: the third, Lake Goukcha, or Sevan, is fresh. The Dead Sea, in Syria, which receives the river Jordan, is intensely salt, and is remarkable as lying in a deep hollow, below the general level of the earth's surface.

The names of the principal Asiatic lakes, with the countries in which they are situated, are as follow :—

Aral.....	Turkestan.	Tong-ting.....	China.
Baikal.....	Siberia.	Poyang.....	Do.
Balkashi.....	Do.	Zurrah.....	Afghanistan.
Zaisang.....	Mongolia.	Bakhtegan.....	Persia.
Oubsa.....	Do.	Ooroomiyah.....	Do.
Lop.....	Do.	Van.....	Turkish Armenia.
Koko-nor.....	Do.	Goukcha, or Sevan.....	Russian Armenia.
Tengri-nor.....	Tibet.	Koj-hissar.....	Asia Minor.
Bouka-nor.....	Do.	Dead Sea.....	Syria.
Palte.....	Do.	Galilee, or Tiberias.....	Do.

EXAMINATION QUESTIONS.

1. What is meant by a table-land, or plateau?
2. How many principal table-lands are there in Asia? Name them.
3. Point on the map to the table-lands of Tibet and Mongolia. What is their situation with respect to the rest of the Asiatic continent?
4. Point, in succession, to the plateaus of Afghanistan, Persia, Armenia, and Asia Minor.
5. Where is the region called the Deccan? Point it out upon the map.
6. Which of the table-lands of Asia is most elevated? What height does it reach?
7. What is the general direction of the mountain-chains of Asia?
8. How many of the principal mountain-systems of Asia lie in the direction of east and west? Name them.
9. Name those that lie north and south.
10. Point out the following upon the map—the Himalaya, Altai, Taurus, Ghauts, Hindoo-Koosh, and Mountains of Lebanon.
11. Which is highest among the mountain-systems of Asia? What is the name of its loftiest summit?
12. What proportion does the altitude of the highest peak of the Himalaya bear to that of Mont Blanc, in the Alps?
13. What is the average height of the Altai mountain-system? How far does it extend to the eastward?
14. Which is highest amongst the mountains of Armenia? What tradition attaches to it?
15. What is the name of the highest amongst the mountains of the Lebanon system, and what is its altitude?
16. What is the average height of the Ghauts?
17. How many lowland-plains does Asia comprehend? Name them, pointing to each upon the map.
18. Which is largest amongst the Asiatic lowlands?
19. By what rivers are the plains of Mesopotamia and Babylonia watered?
20. Name the deserts of Asia, and point to them on the map.
21. An extensive region of Asia is watered by rivers which have no outlet to the sea. What portion of the continent does this comprise? Point it out upon the map.

22. How many of the great rivers of Asia flow into the Arctic Ocean? Point out their courses on the map.
 23. How many of the Asiatic rivers have their courses towards the Pacific Ocean? Name them.
 24. Name as many as you can of the rivers that flow into the Indian Ocean, pointing them out upon the map.
 25. What two rivers of Asia flow into the Sea of Aral? What two into the Caspian Sea? And what two into the Persian Gulf?
 26. Which is longest amongst the rivers of Asia? Which three rank next in order of length?
 27. What three rivers rise in the mountain-system of the Himalaya?
 28. Three of the rivers of southern India rise in the chain of the Ghauts:—name them.
 29. Whence do the two great rivers of China derive their origin?
 30. What rivers have their sources in the Altai mountain-system?
 31. What rivers originate on the plateau of Armenia?
 32. Which are the two largest among the lakes of Asia? What characteristic difference is there between them?
 33. What three lakes are situated on the plateau of Armenia? Are their waters salt, or fresh?
 34. Name the lakes that are situated within Mongolia.
 35. What three lakes are situated on the plateau of Tibet?
 36. What two lakes are within China?
 37. What two lakes are in Syria? By what peculiarity is one of them distinguished?
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CLIMATE AND NATURAL PRODUCTIONS.—Asia comprehends a greater variety of climates than any other division of the globe. This results from its vast extent of land, and its great range of latitude. The extreme south of the Asiatic continent nearly touches the equator, and its northernmost portions are within twelve degrees of the pole. Hence there are experienced, within different portions of its vast extent, every variety of temperature, from the burning heat of the tropics to the intensest cold of the Frigid Zone.

But latitude does not alone determine the extraordinary range of Asiatic climates in respect of heat and cold. The vast extent, and great altitude, of the table-lands of Asia; its stupendous chains of snow-covered mountains; the great distance of its central interior from the modifying influence of oceanic moisture;—these require to be taken into account in order to explain the extremes of heat and cold which distinguish the summers and winters of Asiatic lands.

In Asia, as in every other part of the globe, there is a gradual decrease of heat in advancing from the neighbourhood of the equator towards a higher latitude. The southern portion of Asia is in the Torrid Zone; its middle parts fall within the Temperate Zone; and its northerly plains are beyond the Arctic Circle—that is, in the Frigid Zone. Hence the southern

parts of Asia are hotter than its middle portions, and the latter experience a higher temperature than its more northerly regions. But there is also great difference of temperature between the regions of eastern and western Asia, even in similar latitudes, and the extremes of summer and winter temperature impart wide differences of climate even to countries which make near approach to equality in so far as the average heat of the year is concerned. In general, the eastern parts of Asia are colder than the western, and they have greater extremes of heat and cold at opposite seasons of the year; that is, they have hotter summers and colder winters. Similar extremes characterise the high plains of central Asia, and (in greater or less measure) all its table-land regions.

Three broad and well-marked climatic divisions may be marked out upon the map of Asia:—1. A southern belt of countries, in which the air is hot and moist; 2. A middle zone, which is generally cold and dry, but with great extremes of summer and winter; and, 3. A northerly zone, which is a region of intense and prolonged cold. The first comprises the countries that border on the Indian Ocean and the China Sea (with the exception of Arabia, which is characterised by aridity). The second includes the high plateaus which stretch in succession from the shores of the Red Sea to the further extreme of Mongolia. Tibet and Mongolia furnish its most prominent examples: Afghanistan, Persia, and Arabia, fall within its limits, though the low belt of country which borders the outer edge of the Arabian peninsula is intensely hot and arid, and the shores of the Persian Gulf are among the hottest regions of the globe. The third zone stretches from the shores of the Caspian Sea and the Lake Aral to the easternmost limits of the Siberian plain: Turkestan and Siberia are the countries that it embraces.

The quantity of rain that falls in most parts of southern Asia is very great—vastly greater than is the case in any part of Europe. But it falls at particular seasons only, and within a brief space of time. In the countries of the Torrid Zone (to which the south of Asia belongs), the changes of the year are marked by the recurrence of the wet and the dry seasons. Summer and winter, such as they are experienced in temperate latitudes, are there unknown; a lengthened period of dry weather (during which the sun is almost uniformly bright and the sky cloudless) is succeeded by a season of excessive rain, which again gives place to returning drought and heat. These

changes are intimately connected with the direction of the winds which blow periodically over the Indian Ocean and the bordering countries, and which are known as the *monsoons*. Throughout southern Asia there is a summer monsoon (April to September), which blows from the south-west; and a winter monsoon (October to March), from the north-east. These winds bring alternate rain or drought, according as they have blown over inland regions, or over the adjacent expanse of ocean.

METALS AND MINERALS.—Asia has great variety of mineral produce, and some of the most valued productions of the mineral kingdom are found within its limits. The diamond and other precious stones occur, the former in Borneo and others of the East Indian Islands, and also in continental India. Gold is furnished in some quantity by the mines of Siberia (both in the Altai and Ural mountain-regions), and is also worked in Borneo and the countries of the Indo-Chinese peninsula, together with China and Japan. Both Siberia and China supply silver, and also lead. Iron, copper, tin, and other useful metals, are distributed through the various countries of western and southern Asia. The tin of Banca (one of the smaller islands of the East Indies, situated to the east of Sumatra) is particularly noted. Iron-ore abounds in various parts of India. Coal is distributed through various parts of India, China, and Burmah, and is worked in the small island of Labuan, off the north-west coast of Borneo. In western Asia, coal occurs in Asia Minor and in the mountain-range of Lebanon, on the Syrian coast.

VEGETATION.—The native productions of the Asiatic soil are rich and diversified. A great number of the food-plants that are most useful to man, and are now most extensively employed, throughout the globe, in the supply of man's wants, were originally derived from Asia. Rice, and probably wheat, among the *cereals*; the date, fig, vine, plum, cherry, peach, apple, pomegranate, olive, mulberry, lime, walnut, almond, cocoa-nut, orange, lemon, citron, and banana, amongst fruits; together with the tea-plant, and various spices, are all native to the Asiatic soil. The sugar-cane, indigo, cotton, and hemp plants, are also native to various countries of Asia.

* The word monsoon (which is Malay) signifies *season*, a fact which is evidence of the immediate dependence of Indian climates upon the periodical of the atmosphere.

There are, besides, an immense variety of forest trees, as the teak, ebony, iron-wood, sandal-wood, rose-wood, cedar, and many other valuable woods, besides abundant varieties of the oak, birch, cypress, and other trees that belong to the southern and middle latitudes of Europe.

Rice is the chief food-plant of southern Asia, and is the prime support of life to the immense population of China and India. The fruit of the date-palm supplies a like place to the people of Arabia and other comparatively arid regions of south-western Asia. The cocoa-nut palm is characteristic of the islands of southern and south-eastern Asia, with the shores of the two Indian peninsulas. The tea-plant is a native of China and Japan, and scarcely reaches beyond their limits. The high plateaus of central Asia are distinguished chiefly by the abundance of their grasses: boundless pastures stretch through the whole middle belt of Asia, from the shores of the Caspian to the banks of the Amoor and the waters of the Pacific.

ZOOLOGY.—The variety of animal life belonging to Asia is very great. All our domestic quadrupeds are native to it, as well as many other animals which are of the highest utility to civilised man. First in importance among these is the camel, which ranges over the dry plains of south-western and central Asia, from the Red Sea to the furthest extremity of the Gobi and the shores of Lake Baikal, serving everywhere as the means of transport across the arid wilderness. The elephant—another of the Asiatic quadrupeds which man has domesticated—belongs to the warm and watered regions in the south-east of the continent, including the two Indian peninsulas and the island of Ceylon. The horse frequents all southern and middle Asia, as far north as the sixtieth parallel, and the vast plains that stretch to the eastward of Lake Aral are probably its original seat. The wild ass inhabits the plains of central and south-western Asia.

The vast number of animals belonging to the ox tribe are a marked characteristic of Asiatic zoology. They are most numerous in the high plains of central Asia, and comprise, besides the common ox, the aurochs, yak, zebu (or humped ox), buffalo, and others. Antelopes occur in the drier regions of the south-west.

Among *carnivora*,* the lion, tiger, leopard, hyena, wolf, and

* That is, *flesh-eating* (Latin).

jackal, are natives of Asia. The lion has now a much less extensive range than formerly, and is restricted to the countries lying between the Euphrates and the Indian desert. The tiger is found over a much wider circuit, and frequents all the woods and jungles of southern and south-eastern Asia, roaming as far to the north as the deserts of the Mongolian plateau and the Altai Mountains. The hyena and jackal belong chiefly to western Asia; the wolf to the colder districts of the north and west.

The numerous fur-bearing animals which are native to the extreme north of Asia are another of its marked characteristics: among them are the bear, glutton, badger, wolf, fox, lynx, pole-cat, weasel, ermine, marten, otter, sable, squirrel, beaver, hare, and reindeer.

The countries of south-eastern Asia and the islands of the neighbouring archipelago are exceedingly rich in variety of birds, especially those of the *gallinaceous** tribe, many of them distinguished by their beautiful plumage. It is thence that nearly all our breeds of domestic poultry were originally derived. The golden pheasants of China, and the Argus pheasants of the East Indian Islands, belong to this region. The peacock is a native of India. Among insects, the silk-worm is a native of China, and was not introduced into Europe until the close of the fifth century.

The *population* of Asia comprehends at least half the human race, and probably numbers upwards of six hundred millions. China alone is said to contain more than three hundred millions of people, and India has a hundred and seventy millions. The countries of western, central, and northern Asia are much less populous.

Numerous diversities are found among the various families of mankind by whom Asia is inhabited; diversities of language, as well as of personal structure, appearance, and colour of skin. More than thirty different languages are spoken in India alone, nearly all of them, however, derived from a common stock—the Sanscrit tongue. Most of the languages of western Asia (and also of Europe) are allied, in their roots, to the same stock. The languages of eastern Asia—China and the Indo-Chinese peninsula—form a totally different class.

* That is, the class of birds commonly known as poultry, from the Latin *gallus*, a cock.

The Chinese, the Indo-Chinese, and the Mongolian tribes are distinguished by striking differences of personal appearance from other nations of mankind. They have a yellowish-brown (or olive) complexion; a broad and flattened face, with obliquely-set and deeply-sunk eyes (the inner corner slanting down towards the nose); lank and black hair, with little beard; a broad, square, and thick-set frame, with a stature considerably below that of Europeans. These are the distinguishing characteristics of the Mongolian variety of the human family.

The Malays, who inhabit the Malay peninsula and the islands of the East Indian Archipelago, belong to a distinct stock of nations, regarded as forming another of the leading varieties of mankind.

EXAMINATION QUESTIONS.

1. Why is so great a variety of climates experienced within the limits of Asia?
2. Besides latitude, what else serves to account for the extreme heat and cold of opposite seasons experienced in many parts of the Asiatic continent?
3. Which portions of Asia are within the Torrid Zone; which in the Temperate, and which in the Frigid Zone? Point them out upon the map.
4. What characteristic difference is there between the climates of eastern and western Asia in similar latitudes?
5. What kind of climate do the high table-lands of Asia experience? Mention some regions which serve as examples.
6. Dividing Asia into three belts or zones, what kind of climate is characteristic of each?
7. What countries are embraced within the first or southerly zone?
8. What countries within the second or middle zone?
9. What countries fall within the third or northerly zone?
10. What parts of Asia are distinguished by abundance of rain? By what changes are the seasons known in those localities?
11. What are the monsoons, and where do they prevail?
12. How do the monsoons affect the climate of India?
13. In what countries of Asia is gold found, as an article of native produce?
14. In what countries does silver occur?
15. Over what parts of Asia are iron, copper, and other useful metals, distributed?
16. In what island of the East Indies is tin found? Find out the place of this island on the map.
17. In what countries of Asia does coal occur?
18. Name some of the fruits that are native to the soil of Asia.
19. Mention some of the forest-trees that belong to this division of the globe.
20. Among the *cereals* (corn), what grain forms the chief food-plant of southern and south-eastern Asia?
21. To what parts of Asia is the tea-plant native?

22. By what kind of vegetation are the table-lands of central Asia distinguished?
23. Of domesticated quadrupeds, name some of those that are natives of Asia.
24. Within what portions of Asia is the camel found? Mark out, as well as you are able, its limits of range upon the map.
25. What part of Asia is supposed to have been the original seat of the horse? How far north is this animal found?
26. In what region of Asia are the varieties of oxen most numerous?
27. Among carnivorous animals, name some that are natives of Asia.
28. In what part of Asia is the lion now found in a native state?
29. In what parts is the tiger found?
30. To what regions of Asia do the hyena and jackal chiefly belong? To what parts the wolf?
31. In what region of Asia are fur-bearing animals common? Name some of them.
32. What class of birds are numerous in south-eastern Asia and the neighbouring islands?
33. To what (in round numbers) is the population of Asia supposed to amount?
34. Which two countries of Asia contain the largest number of inhabitants?
35. In what particular of appearance do the Chinese and the people of south-eastern Asia differ from other varieties of mankind?
36. Point on the map to some of the countries that are respectively occupied by the Mongolian and the Malay varieties of the human race.

COUNTRIES OF ASIA.

TURKEY IN ASIA.

SITUATION, BOUNDARIES, AND EXTENT.—The Turkish Empire embraces an extensive tract of country in the south-east of Europe, which has been already described. It includes also several large countries in the west of Asia, which form together a continuous region, stretching from the shores of the Grecian Archipelago and the Black Sea to the head of the Persian Gulf.

Turkey in Asia is bounded on the north by the Black Sea; on the west and south-west by the Mediterranean; on the south by the Arabian desert; and on the east by Persia and the Russian territory of Transcaucasia. Its area is probably not less than half a million square miles.

The Turkish dominions in Asia comprehend three distinct regions:—1. Asia Minor; 2. Syria; and 3. The Countries on the Euphrates and Tigris.

1. **ASIA MINOR*** is an extensive peninsula, enclosed on

* That is, the *Lesser Asia*, by distinction from the larger portion of the continent so called.

three sides by the waters of the Black Sea, the Sea of Marmora, the Archipelago, and the Mediterranean. The Sea of Marmora communicates with the Black Sea by the Channel of Constantinople (or Bosphorus), and with the Archipelago by the strait of the Dardanelles—the ancient *Hellespont*. The Dardanelles, the Sea of Marmora, and the Channel of Constantinople, separate the shores of Asia from those of Europe.

COASTS.—The western coasts of Asia Minor are indented by numerous gulfs, among which those of Mytilene, Smyrna, Samos, and Kos, are the most extensive. On the south coast are the gulfs of Makri, Adalia, and Scanderoon. The Gulf of Scanderoon is the extreme eastern angle of the Mediterranean, dividing the shores of Asia Minor and Syria.

Cape Baba, the most westerly point of the Asiatic continent, is on the coast of the Archipelago.

ISLANDS.—Numerous islands line the western coasts of Asia Minor, forming part of the extensive region known as the Archipelago. Mytilene, Khio (or Scio), Samo, Kos, and Rhodes, are the largest amongst them. The larger island of Cyprus is in the open Mediterranean, further to the eastward.

MOUNTAINS AND PLAINS.—The interior of Asia Minor is a plateau, ranging between two thousand and four thousand feet above the level of the sea. Upon the north and south this plateau descends by successive terraces to the shores of the Black and Mediterranean Seas: upon the west it gradually declines towards the waters of the Archipelago. The most continuous chain of heights is that of Mount Taurus, which forms the southern border of the plateau, towards the Mediterranean.

The highest summits of the Taurus hardly exceed 5000 feet, but the passes through the chain consist of deep and rugged defiles. Some of the detached mountains of Asia Minor are of greater height: Mount Argæus, on the interior plateau, is upwards of 13,000 feet; and Mount Olympus,* in the north-west part of the peninsula, reaches 9000 feet in height. Mount Ida, further west, and beside the shore of the Archipelago, is nearly 5000 feet.

RIVERS.—The largest river of Asia Minor is the Kizil-Irmak

* Several mountains bore, in classical geography, the name of Olympus. The one here spoken of is distinguished as the Mysian Olympus, from its situation on the borders of the ancient Mysia and Bithynia. The most celebrated of the number was the Thessalian (or Macedonian) Olympus, the fabled abode of the gods.

(ancient *Halys*), which flows into the Black Sea. Among numerous others, the principal are the Sangarius (also flowing into the Black Sea); with the Calcus, Hermus, Cayster, and Mæander,* which flow into the Archipelago.

LAKES.—The largest is the salt-water lake of Koj-hissar situated on the interior table-land. There are, besides, several of smaller size, most of them without any outlet to the sea. They receive many of the smaller streams by which the high plains of the interior are watered.

2. SYRIA extends along the coast of the Mediterranean, from the Gulf of Scanderoon southward to the border of Egypt. It comprehends a mountain-region in the immediate neighbourhood of the coast, and a desert plain in the interior. This desert reaches east to the banks of the Euphrates. The south-westerly portion of Syria is the Palestine of sacred history.

CAPIES.—The two chief headlands on the Syrian coast are Cape Khanzir and Cape Carmel. The former of them marks the southern limit of the Gulf of Scanderoon: Cape Carmel is on the south side of the Bay of Acre.

MOUNTAINS AND PLAINS.—The mountains of Syria consist principally of two chains, which stretch in the direction of north and south, parallel to a large portion of the coast. These constitute the Mount Lebanon of the Bible, and were known to the Greeks and Romans by the names of Libanus and Anti-Libanus—the former being the chain nearer the coast, and the other the more inland chain. Between the two is a narrow valley, the Cœle-Syria (*i.e.*, Hollow Syria) of classical geography. The higher summits of the Lebanon system are between nine and ten thousand feet in altitude. The mountain called Jebel esh-Sheikh† (Mount Hermon of Scripture) is probably not less than 10,000 feet high, and its summit is covered with snow during the greater part of the year.

The chains of Mount Lebanon do not reach the entire length of the Syrian coast. To the southward of Mount Hermon, the country consists of a high plateau, intersected by a deep ravine in the direction of north and south, and de-

* These are properly the ancient names—those by which the rivers are known in classic geography and story. They are more familiar appellations than the modern Turkish names.

† That is, Mountain of the Old Man. The word *Jebel* is the common Arabic term for mountain. *Sheikh* is the name given to the head of an Arab tribe or commonly an old man.

clining on the west towards the Mediterranean. This ravine forms the bed of the river Jordan and the Dead Sea.

In the northwardly portion of Syria there is also a long valley, which lies between the mountain-chain that borders the coast and a more inland range. The river Orontes flows through this valley.

The valley of the Orontes, the plain between the parallel chains of Libanus and Anti-Libanus, and the valley of the Jordan, form together a long and nearly continuous depression, which runs through the whole length of Syria in the direction of north and south. The valley of the Jordan and the bed of the Dead Sea are the deepest part of this depression, which sinks considerably below the average level of the earth's surface.

RIVERS.—The two chief rivers of Syria are the Orontes and the Jordan. The former has a northwardly course, and enters the Mediterranean: the latter flows to the southward, and falls into the Dead Sea.

LAKES.—The principal are the Dead Sea and the Lake of Tiberias (or Sea of Galilee). The Lake of Tiberias is a body of fresh water: the river Jordan passes through it, and flows thence onward to the Dead Sea. The valley of the Jordan is intensely hot, owing to its great depression below the country upon either side. The Dead Sea consists of water which is intensely salt—so much so as to render it unfit (as the name implies) for the support of animal life. No fish exist in its bitter and heavy waters, and the aspect of the surrounding tract of country is arid, desolate, and almost lifeless. The surface of the Dead Sea is upwards of 1300 feet lower than the level of the Mediterranean.

3. COUNTRIES ON THE EUPHRATES AND TIGRIS.—These comprehend a high table-land—the plateau of Armenia—in which the rivers have their origin, and an extensive lowland plain through which they afterwards flow, on their way to the Persian Gulf.

MOUNTAINS AND PLAINS.—The plateau of Armenia lies at an elevation of 6000 feet above the sea, and the mountains by which it is crossed reach 4000 feet and upwards above its level—so that their summits are more than 10,000 feet above the sea.

Below the mountain-region, to the south-eastward, are the plains of Al-jezireh and Irak-Arabi, through which the

Euphrates and Tigris flow. The plain of Al-jezireh (which coincides with the ancient *Mesopotamia*) is enclosed between the rivers, which are there at a wide distance apart. The plain of Irak-Arabi, further to the south-east, and at a lower level, corresponds to the ancient *Babylonia*.

RIVERS AND LAKES.—The Euphrates and Tigris are the chief rivers of this region. The Euphrates, which is 1700 miles long, is the most considerable river of western Asia. The Tigris joins the Euphrates about 100 miles above the Persian Gulf: the united stream bears locally the name of Shatt el-Arab, or river of the Arabs. Lake Van lies within the Turkish portion of the Armenian plateau.

CLIMATE AND NATURAL PRODUCTIONS.—The climate of Asiatic Turkey is for the most part warm, but is greatly varied by the inequalities of elevation and physical aspect which distinguish its different regions. The winters of the Armenian table-land are excessively severe, and the heat of summer is equally great. The interior of Asia Minor exhibits like differences of temperature, though in more moderate degree. The coast regions of Syria and Asia Minor have generally a warm and delightful climate. The seasons of rain and drought are of regular recurrence, and the operations of agriculture are of necessity regulated by them.*

Among the natural productions of Turkey in Asia are a variety of rich fruits and other valuable plants. The vine grows luxuriantly in the watered valleys, and the date-palm flourishes on the borders of the desert. Wheat, barley, rice, and maize, with tobacco, hemp, and flax, are articles of culture. The mineral produce includes coal (found on the north coast of Asia Minor, and also on the slopes of the Lebanon, upon the Syrian coast), together with ores of iron, lead, copper, and other useful metals.

POPULATION AND INDUSTRIAL PURSUITS.—The population of Turkey in Asia is supposed to amount to sixteen millions. They form a motley assemblage of various nations, comprising—besides Turks, the ruling people—Greeks, Syrians, Jews, Arabs, Armenians, Turkomauns, Koords, Druses, and many other tribes of mountaineers. The Turks themselves are re-

* In Palestine (which is part of Syria) the winter months are the season of the most abundant rains. Then a short period of dry weather ensues, followed by a further season of rain. After this, a long dry season succeeds, lasting from the middle of April to the end of September.

latively more numerous in Asiatic Turkey than in the European provinces of the empire, and constitute a majority of the whole.

The pursuits of industry are generally at a low ebb. The bulk of the population are engaged in agriculture, which, however, is pursued in a very inefficient manner, and scanty harvests are of frequent occurrence. Some manufactures of silk and cotton fabrics, leather, and various articles of an ornamental description, are carried on in the larger towns. The Turkey carpets are woven by the women of the Turkomaun tribes, in the interior of Asia Minor.

The amount of foreign trade is considerable. It is carried on chiefly with Britain and other European countries, from various ports upon the coasts of Asia Minor and Syria; and with the countries to the eastward of Turkey by means of caravans which cross the Syrian and Arabian deserts. Smyrna, on the coast of the Archipelago; Trebizond, on the Black Sea; and Beyrout, on the Syrian coast, are the principal seats of maritime trade. The cities of Aleppo, Damascus, and Bagdad, are the chief centres of the caravan traffic.

DIVISIONS AND TOWNS.—The whole of the Turkish Empire is divided into *eyalets* or *pashalics*, each under the government of a *pasha*.

ASIA MINOR comprehends the governments of Anatolia, Roum, Trebizond, Karamania, Adana, and Marash. The island of Cyprus constitutes a separate government.

The chief towns in each are as follow:—

<i>Governments.</i>	<i>Towns.</i>	<i>Governments.</i>	<i>Towns.</i>
ANATOLIA.....	Smyrna, Brusa, Kutayah, Angora, Sinope.	KARAMANIA.....	Koniyeh, Kaisariyeh.
ROUM.....	Sivas, Amasia.	ADANA	Adana, Tarsus.
TREBIZOND....	Trebizond.	MARASH	Marash.
		CYPRUS.....	Nicosia.

Smyrna is the largest city of Asia Minor, and a chief emporium for the trade of the Levant.* The population comprises an unusual number of Greeks and other Europeans, by whom its extensive commerce is carried on. Smyrna derives interest from its antiquity: it existed many centuries before the Christian era, and was one of the most famous cities of Ionia. It

* The eastern part of the Mediterranean is commonly called the Levant. The name is Italian in its origin, and signifies the East.

has also the distinction of being one of the Seven Churches of the Apocalypse. *Brusa* (the ancient Prusa of Bithynia) lies at the foot of Mount Olympus: not far to the eastward are the small towns of *Iznik* (the ancient Nicæa), and *Ismid*, the Nicomedia of ancient story. The latter place lies at the head of an arm of the Sea of Marmora.

Both *Kutayah* and *Angora* (ancient Ancyra) are inland cities—the latter famous for the breed of goats, with fine silky hair, that are reared in its neighbourhood. *Angora*, like so many other among the cities of western Asia, has also historic fame. *Sinope* is a seaport on the Black Sea, about the middle of the coast-line which forms the northern side of the peninsula.

Sivas, the chief place in the province of Roum, lies near the upper course of the Kizil-Irmak or Halys—a river which once formed the limit between the empires of Lydia and Media. *Trebizond* (the Trapezus of classic story) is a flourishing seaport, and possesses the chief part of the commerce of the Euxine.*

Koniyeh, on the interior plains within the southern division of the peninsula, is chiefly interesting as representing the ancient Iconium, familiar in connexion with the history of St Paul. *Kaisariyeh*, the ancient Cæsarea of Cappadocia, and a place of considerable trade, lies at the base of Mount Argæus.

Adana and *Tarsus*—the former on the river Syhoun (ancient Sarus), the latter on the little stream of the Cydnus—lie in the Cilician plain, to the south of the Taurus. *Tarsus* is distinguished as the birthplace of the Apostle Paul. *Marash* is further to the north-east, near the river Jyhoon, the Pyramus of ancient geography.

Nearly every part of Asia Minor (and, indeed, of western Asia in general) exhibits remains of antiquity; its plains and hill-sides, its rivers and mountain-passes, are richly stored with historic associations, and its towns—now often in ruins—display the abundant traces of former splendour. Troy stood in the north-western corner of this peninsula; Smyrna, Ephesus, Miletus, and other famous cities of Ionia, were on its western shores; Sardis, Philadelphia, Laodicea, Nice, Angora, Iconium, Cæsarea, upon its interior plains. The invincible

* That is, the Black Sea.—*Pontus Euxinus* of ancient geography, whence the name of Euxine is often given to it,

phalanx of the Macédonian conqueror,* in ancient times, and the armies of the Crusaders, in a more recent period, have marched through its plains, and the footsteps of Christian apostles have imparted sanctity to its soil.

SYRIA embraces, in modern geography, the four provinces of Aleppo, Tripoli, Acre, and Damascus, each of which is the seat of a pashalic. Its south-westerly portion corresponds to the ancient Palestine—the allotted inheritance of the Jewish nation, and the “Holy Land” of the Christian. The larger part of Palestine falls within the pashalic of Damascus: a small portion is within the pashalic of Acre.

The chief cities of modern Syria are Damascus, Aleppo, Homs, Hamah, Antioch, Jerusalem, Nablous, and Tiberias—all of them inland; with Beyrout, Tripoli, Latakia, Sidon, Tyre, Acre, Jaffa, and Gaza, which are on or near the coast. Jerusalem, Nablous, Tiberias, Jaffa, and Gaza, fall within the former limits of the Holy Land.

Damascus is now the largest city of Syria, and a great centre of caravan trade. It stands in a fertile plain at the foot of the range of Anti-Libanus, and beside the little stream of the Barada, the Abana of Scripture (2 Kings v. 12). *Aleppo*, in northern Syria, was formerly more populous, but has been repeatedly injured by earthquakes, to which every part of Syria is more or less liable. *Homs* and *Hamah* are both within the valley of the Orontes, the chief river of northern Syria. *Hamah* corresponds to the Hamath of Scripture.

The most famous locality within the valley of the Orontes is *Antioch*—no longer the magnificent city of a former age, but a small provincial town. It stands a few miles above the mouth of the Orontes, on the southern bank of the river.

Scanderoon,† the most northerly of the Syrian coast-towns, stands on the shore of the gulf called by its name, and serves as the port of Aleppo. *Latakia* (the ancient Laodicea, but now chiefly noted for the tobacco grown in its vicinity) is to

* Alexander the Great.

† The name Scanderoon—or, properly, Iskenderoon—is derived from that of Alexander, known as “Iskender” in modern oriental story and tradition. The name of the great Macedonian is extensively diffused through western Asia.

the south of the Orontes. *Tripoli* and *Beyrout* follow in the same direction. *Beyrout* constitutes the port of *Damascus*, and has become, within recent years, the chief seat of Syrian commerce. To the south of *Beyrout* are *Saida* (the ancient *Sidon*); *Soor* (the Tyre of antiquity); and *Acre*, the *Accho* or *Ptolemais* of Scripture, and the *St Jean d'Acre* of the Crusaders: all three are now comparatively small places, but *Acre* is a strong fortress. The Bay of *Acre* is bounded on the south by the promontory of *Carmel*, which is within the limits of the Holy Land.

The most important locality in Palestine is *Jerusalem*, which stands on a rocky platform—enclosed on three sides by deep ravines—about midway between the Mediterranean and Dead Seas. *Jerusalem*, consecrated by our Saviour's sufferings, is now only a Turkish provincial town, of moderate size. It has been made, within recent years, the seat of a Christian bishopric. *Bethlehem*, the scene of our Lord's nativity, is a village lying a few miles south of *Jerusalem*. *Hebron* is further south. *Jaffa*, on the coast, is the port of *Jerusalem*, and a place of some trade. It represents the ancient *Joppa*.

Nablous—the *Shechem* of Scripture, and *Neapolis* of the Greek writers—is to the north of *Jerusalem*, midway between the Mediterranean coast and the valley of the *Jordan*. *Nazareth* is further north, and only five miles distant from the base of *Mount Tabor*, which rises in conical form above the fertile valley of *Esdraelon*. *Tiberias* is a small city lying on the western shore of the beautiful lake of *Tiberias*, or *Sea of Galilee*.

Gaza, in the south-west of Palestine, is of some commercial importance, derived from its position on the line of route between *Syria* and *Egypt*. It occupies the same site as the ancient *Gaza*, one of the chief cities of the *Philistines*.

Among the numerous remains of former greatness which belong to *Syria*, two sites command especial notice on account of their architectural beauty. These are *Baalbek* and *Palmyra*. The former lies to the north-west of *Damascus*, in the valley which is enclosed between the parallel chains of *Libanus* and *Anti-Libanus*; it represents the ancient city of *Heliopolis*,* and still exhibits the remains of its magnificent temples. *Palmyra*, the *Tadmor* of Scripture, is to the north-eastward of *Damascus*, within a small oasis in the heart of the *Syrian*

* That is, "City of the Sun."

desert. It has the beautiful remains of an ancient temple of the sun.

The desert which borders the highlands of Syria to the eastward, and which stretches thence to the banks of the Euphrates, exhibits features which differ in some essential particulars from those that are commonly associated with the idea of the wilderness. It has no perennial streams, and hence, during the summer and autumn months, when it is parched by the sun's burning rays, exhibits an arid and comparatively lifeless surface, excepting only where an occasional spring of water creates a surrounding oasis. But at other seasons, when the rains of winter and early spring refresh the thirsty ground, the desert becomes a carpet of verdure, strewn with wild flowers of the most brilliant hue. This is the "glory of the wilderness," destined to pass away with the returning heats of summer.

The COUNTRIES ON THE EUPHRATES AND TIGRIS comprehend the following provinces and towns :—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
ERZERROOM.....	Erzerroom.	DIARBEEKIR.....	Diarbekir.
KARS.....	Kars.	ORFAH.....	Orfah.
BAYAZID.....	Bayazid.	MOSUL.....	Mosoul.
VAN.....	Van.	BAGDAD.....	Bagdad, Basra.
MOOSH.....	Moosh.	KOORDISTAN.....	Bitlis.

The first six of these provinces belong physically to the high table-land of Armenia. The three next on the list (Orfah, Mosoul, and Bagdad) embrace the valleys of the Euphrates and Tigris below the mountain-region. Koordistan is a border-country between Turkey and Persia, and consists principally of rugged mountain-chains, with intervening valleys.

The city of *Erzerroom* stands near the source of the more northwardly of the two arms of the Euphrates, on a high plain, 6000 feet above the sea. *Kars* (noted for its gallant defence when besieged by the Russians in 1855) is to the north-east of *Erzerroom*, on a tributary of the river *Aras*. *Bayazid* is near the base of Mount *Ararat*. The town of *Van* stands on the east shore of the extensive lake called by its name. *Bitlis*, the most considerable place in Koordistan, is not far from the south-western shore of the Lake of *Van*, on a

stream which joins the Tigris. *Diarbekir* (the ancient *Amida*) is on the Tigris, forty miles below its source.

The city of *Orfah* (the Edessa of the Crusaders) lies within the plain of Al-jezireh, below the mountain-region. This plain coincides with the Mesopotamia* of Greek geography, and the Padan-Aram, or Aram-Naharaim, of the early Scripture history. *Mosoul*, on the right or western bank of the Tigris, is chiefly noteworthy from its proximity to the remains of Nineveh, on the opposite bank of this river.

Bagdad, on the Tigris, is the great city of this region—superior in size and population to any other city in the eastern division of Asiatic Turkey. *Basra* (or Bassora)—formerly of much note as a commercial city, but greatly declined within recent years—lies on the Euphrates, below the junction of the Tigris.

The plain of Irak-Arabi (as the lower portion of the region watered by the Euphrates and Tigris is called) is the Babylonia of ancient geography. It is now a marshy tract, even more thinly peopled than other parts of Asiatic Turkey, and the sands of the adjoining desert press closely upon the river's western bank. But every portion of the plain exhibits remains of former population and culture.

Among the many ancient sites which belong to the lands watered by the Euphrates and Tigris, two attract especial notice. These are *Nineveh* and *Babylon*, the former capitals of the Assyrian Empire. The remains of Nineveh are found upon the east bank of the Tigris, opposite the modern city of *Mosoul*. The ruins of Babylon lie upon either bank of the Euphrates, in the neighbourhood of the small modern town of *Hillah* (to the south of *Bagdad*). The treasures of ancient art brought within recent years from the site of Nineveh have enriched our museums. The remains of Babylon have not yet been fully explored.

GOVERNMENT.—Asiatic Turkey is under the same general government as Turkey in Europe. The Sultan, resident at Constantinople, delegates authority to the various pashas, who exercise nearly absolute rule in the different provinces.

* That is, "in the middle of the rivers"—the Euphrates and Tigris. Aram-Naharaim (Syria between the rivers) has the same meaning in Hebrew.

QUESTIONS ON TURKEY IN ASIA.

1. How is Turkey in Asia bounded?
2. What three great divisions does Turkey in Asia embrace? Point to each upon the map.
3. What straits and intervening sea divide the coasts of Asia Minor from those of the European continent?
4. What islands adjoin the western shores of Asia Minor? What larger island lies further to the eastward, in the open portion of the Mediterranean?
5. What kind of country (as to physical features) is the interior of Asia Minor? What mountain-chain forms the southward border of this region?
6. In what part of Asia Minor are Mounts Argæus, Olympus, and Ida? Which is highest of the number?
7. Name the principal rivers of Asia Minor, and the seas into which they flow.
8. Point out upon the map the limits of Syria in the direction of north and south. How far does it reach to the eastward?
9. What mountain-region adjoins the coast of Syria, and what is the name of the highest summit which it includes?
10. A long valley stretches through the entire length of Syria from north to south: what two rivers flow through its northerly and southwardly portions? Which part of this valley is the deepest?
11. Name, and point out upon the map, the two principal lakes that belong to the valley of the Jordan. What distinguishes the larger of the two?
12. What kind of region do the rivers Euphrates and Tigris water? Point on the map to the courses of those rivers.
13. What lake is within the Turkish portion of Armenia? Point to it upon the map.
14. State what you know concerning the climate of Turkey in Asia.
15. Mention some of the fruits and other plants that are among the productions of Asiatic Turkey.
16. In what parts of Turkey in Asia is coal found? What other metals occur?
17. What other races, besides Turks, form part of the population?
18. What three cities are the chief seats of the maritime commerce of Turkey in Asia? What three of its inland trade?
19. How is Turkey in Asia divided? How many of these divisions are within Asia Minor?
20. In what part of Asia Minor are the following places—Smyrna, Brusa, Koniyyeh, Trebizond, and Adana? Find out their places on the map.
21. With what ancient cities do Brusa, Koniyyeh, Isnik, Ismid, Angora, and Kaisariyyeh, correspond?
22. On what river does Sivas stand? What was the ancient name of this river, and what empires did it divide?
23. Point out Tarsus on the map. By what is Tarsus distinguished, and on what river does it stand?
24. Mention some of the great cities of antiquity that were situated within Asia Minor.
25. What portion of Syria corresponds to Palestine, or the Holy Land? Point to this part on the map.
26. Name some of the chief inland cities of Syria, pointing out their places on the map. Which amongst them are within Palestine?
27. Name the chief maritime cities of Syria.
28. On what rivers does Damascus stand? By what name is this river referred to in Scripture?
29. On what river does Antioch stand? What other towns are within the valley of the same stream?
30. To what ancient cities do the modern towns of Latakia, Seida, Soer, and Acre, correspond?

31. What kind of site does Jerusalem occupy?
32. Where are Bethlehem, Hebron, Nazareth, Tiberias, and Gaza? Point them out upon the map.
33. Where is the town of Nablous? What ancient city does it represent?
34. Where are Baalbek and Palmyra? For what are they distinguished?
35. What are the general features of the Syrian desert?
36. Of the provinces on the Euphrates and Tigris, name some of those that are situated on the Armenian plateau.
37. Where is Koordistan, and what kind of a country is it?
38. Where are Erzeroom, Kara, Bayazid, Van, and Diarbekir? Point them out on the map.
39. Where are Orfah and Mosoul? To what city of a former period does Orfah correspond?
40. Where are the plains of Al-jezireh and Irak-Arabi? By what names were they formerly known?
41. Where are Bagdad and Basra? For what is Bagdad noteworthy?
42. What two great cities of antiquity, now in ruins, belong to the region of the Euphrates and Tigris? Point out the locality of each upon the map.

ARABIA.

SITUATION, BOUNDARIES, AND EXTENT.—Arabia is a large country in the south-west of Asia. It is bounded on the north by Turkey in Asia, on the west by the Red Sea, on the south by the Gulf of Aden and the Indian Ocean, and on the east by the Gulf of Omaun and the Persian Gulf.

In shape, Arabia forms a peninsula. Its area probably exceeds 1,000,000 square miles.

COASTS, &c.—The Red Sea, which forms the western limit of Arabia, divides, at its northern extremity, into two gulfs. The more westerly of these is called the Gulf of Suez; the more eastwardly, the Gulf of Akaba. The tract enclosed between them is the Sinai peninsula. The shores of the Red Sea are lined by coral reefs, which make the navigation dangerous, but its mid-channel is open and deep. The Strait of Bab-el-Mandeb connects the Red Sea with the Gulf of Aden and the Indian Ocean.

The Persian Gulf has on its western side an extensive submarine bank, upon which the pearl-fishery is pursued. The Strait of Ormuz connects the Persian Gulf with the Indian Ocean.

MOUNTAINS AND PLAINS.—Arabia has mountain-chains lying in a parallel direction to its seaward borders—west, south, and east—and there are also some high ranges upon the plateau. But the latter has been seldom visited by

Europeans, and is little known. Of the coast-mountains, the most important are those which nearly fill the small peninsula of Sinai. The highest peak of the Sinai mountains reaches 9300 feet above the sea.

A low and narrow plain—called the Tehama—stretches round the coast of the Arabian peninsula, between the sea and the adjacent mountain-region. This plain is arid, destitute of water, and intensely hot.

The interior plateau includes a series of high and desert plains, destitute of perennial streams, but generally adapted for pasturage. The Arabian desert presents for the most part a gravelly or sandy surface, but is in some places covered with high and barren masses of hill, forming a rocky or stony wilderness. This is the case in the north-western portion of the country—including the Sinai peninsula, and the adjacent tract towards the border of Syria—which forms the Arabia Petraea* (i.e., the Rocky Arabia) of ancient geography.

Arabia has neither rivers nor lakes. There are numerous water-courses—that is, beds of streams—which become rapid torrents during the season of rain, but are dry for the greater part of the year.

CLIMATE AND NATURAL PRODUCTIONS.—The climate of Arabia is hot and dry—excepting, perhaps, in the higher parts of the mountain-regions, towards the coast. The narrow belt of the Tehama is intensely hot and arid, even more so on the side of the Persian Gulf than on the other coasts of the peninsula. Rain very seldom falls in this region.

The only parts of Arabia that possess natural fertility are found within the mountain-region, chiefly towards the south-western borders of the peninsula. Rain is here more frequent, and there are perennial springs. This was accordingly distinguished by the ancients as Arabia Felix, or the Happy Arabia. The vine, fig, peach, almond, and many other fruits flourish in this region, and the coffee-shrub is abundantly cultivated. The date-palm also flourishes there, and is found, besides, in every oasis of the Arabian desert.

INHABITANTS.—Arabia is supposed to have not less than twelve millions of inhabitants; but nothing certain is known on this head. There is a characteristic difference between the Arabs of the desert, who *dwell in tents*, and wander from one place to another, and the *dwellers in towns*, who have fixed

* Greek—*Petra*, a rock.

places of abode. The Arabs of the desert are called Bedouins, and their way of life naturally leads to numerous points of difference between them and the dwellers in fixed habitations. Their wealth consists in their flocks and herds—sheep, goats, camels, and horses: they look with contempt upon the dwellers in towns, and the sense of freedom which accompanies existence in the wilderness compensates for the many deprivations which such a way of life involves. Even in the desert, however, there are recognised limits to the different tribes, beyond which they never pass.

There is little of manufacturing industry in Arabia, but the trade which passes through parts of the country is considerable. This is wholly carried on by *caravans*—that is, companies of persons who associate together for mutual protection in crossing the wilderness, consisting of merchants, guides, soldiers, pilgrims, and various followers, with their camels and horses. The camel is uniformly employed as the beast of burden, and that animal is peculiarly suited to the passage of the arid wastes of western and central Asia. The caravan traversing the Arabian or the Syrian desert, with its attendant train of camels, is the earliest and most enduring of the pictures of Oriental life, and all its essential features are the same now that they were upwards of three thousand years since.*

DIVISIONS AND TOWNS.—The divisions of Arabia are seven in number :—

<i>Divisions.</i>	<i>Towns.</i>	<i>Divisions.</i>	<i>Towns.</i>
SINAI-REGION.....	Tor, Akaba.	OMAN.....	Muscat.
EL-HEJAZ.....	Mecca, Medina.	EL-HAZRA.....	
YEMEN.....	Sana, Mocha, Aden.	NEJD.....	Derayah.
HADRAMAUT.			

The Sinai mountain-region, situate at the head of the Red Sea, fills the small peninsula between the Gulfs of Suez and Akaba, and the high grounds which it comprises stretch thence to the southern borders of Syria. Wandering Arabs, or Bedouins, are almost the sole inhabitants of the entire region, which is a wilderness of rocks and mountains, alternating with arid plains and gravelly beds of torrents, destitute of running water during three-fourths of the year. This region was the scene of the forty years' wandering of the Israelites. Mount Sinai, whence the law was delivered to the

* See Genesis xxxvii. 25.

assembled tribes, is found among the central and highest cluster of mountains, in the very heart of the peninsula.

A long valley stretches northward from the head of the Gulf of Akaba to the southern limits of the Dead Sea, in the same general direction as the depression which reaches through the whole length of Syria.* The mountains which border this valley on its eastern side are the Mount Seir of the Bible, and one of them coincides with Mount Hor, the scene of the prophet Aaron's death. The ancient city of *Petra*—now marked by the numerous tombs cut in the solid rock—is found within a deep recess in the heart of the mountains, near the eastern foot of Mount Hor.

The region of El-Hejaz is the Holy Land of the Mohammedans. It includes the cities of *Mecca* and *Medina*—the former the birth-place, and the latter the burial-place, of Mohammed, the Arabian prophet. *Jiddah*, on the Red Sea, is the port of Mecca; *Yambo* is the port of Medina.

Sana, the chief city of Yemen, is in the heart of the coffee district, and is the capital of one of the native princes (or *Imaums*) of Arabia. *Mocha*, on the Red Sea, is its chief port. *Aden*, situated on the shore of the gulf, to the eastward of the strait of Bab-el-Mandeb, has become important within recent years as a station on the line of communication between England and India, by way of the Mediterranean and Red Seas.†

Muscat, situated on the south-eastern coast of Arabia, is the chief city of Omaun, one of the most important of the Arabian sovereignties, and is a flourishing seat of commerce. Hadramaut (on the south coast), and El-Hassa, or Lahsa (along the shore of the Persian Gulf), contain no towns of any importance. *Derayah* is the chief place in the central province of Nejd—a plateau of undulating and rocky surface, which reaches northward to the Syrian border, and is famed for the excellence of its camels.

GOVERNMENT, &c.—The people of Arabia have been, from the earliest ages, divided into tribes, the government of which is patriarchal. That is, the head of each tribe—or *sheikh*, as he is termed—occupies, in regard to its members, the place of the father of a family. The laws, customs, and institutions of

* See Page 161.

† This is called "the Overland Route," from its involving the passage over the Isthmus of Suez.

Arabia all proceed upon this assumption of patriarchal authority—the only mode of government suited to the dwellers in the wilderness.

Arabia has, in consequence, never been subject, as a whole, to any single power. In the present day the rulers of Yemen and Omaun, each of whom bears the title of Imaum, or Sultan, are the most important of its native rulers; but even their authority is little recognised, excepting by the fixed population in the towns within the respective limits of their dominions. The Bedouin—true son of the wilderness—pays submission only to the head of his own tribe. The region of El-Hejaz is nominally subject to the Sultan of Turkey, who is represented by an officer (styled the *shereef*) resident at Mecca. The Sinai region falls within the dominions of the Pasha of Egypt.

QUESTIONS ON ARABIA.

1. How is Arabia bounded? What is its general shape?
 2. By what circumstance is the Red Sea distinguished? Into what gulfs does its northern extremity divide?
 3. What straits connect the Red Sea and the Persian Gulf with the ocean?
 4. What are the general features of Arabia, as to mountains and plains?
 5. Where is the region called the Tehama? What kind of tract is it?
 6. What kind of aspect has the Arabian desert?
 7. Which part of the country was distinguished by the ancients as Arabia Petræa? Point it out upon the map.
 8. What kind of climate has Arabia?
 9. Which portion of the country was called Arabia Felix by the ancients? What are its productions?
 10. Into what two classes are the people of Arabia divided?
 11. By what name are the Arabs of the desert called, and what is their mode of life?
 12. What kind of commerce does Arabia possess? Through what agency is it carried on?
 13. Name the divisions of Arabia, pointing them out upon the map.
 14. In which division of Arabia are the towns of Mecca and Medina?
 15. In which are Muscat, Sana, and Mocha?
 16. By what great event is the Sinai region distinguished?
 17. In what part of Arabia is the ruined city of Petra? Near the foot of what mountain?
 18. Which division of Arabia is distinguished as the Holy Land of the Moham-medans? And why?
 19. Where is Aden? For what is it noteworthy?
 20. Under what kind of government are the people of Arabia?
 21. Which are the two most important among the native rulers?
 22. To what authority is the province of El-Hejaz subject?
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PERSIA.

SITUATION, BOUNDARIES, AND EXTENT.—Persia is a country of western Asia. It embraces the westwardly and larger portion of an extensive plateau which stretches from the Hindoo-Koosh to the Mountains of Armenia, and from the borders of the Caspian Sea to those of the Persian Gulf.

On the north Persia is bounded by Turkestan, the Caspian Sea, and Russian Armenia; on the west by Asiatic Turkey; on the south by the Persian Gulf; on the east by Afghanistan and Beloochistan. In size it is about 500,000 square miles, or ten times larger than England.

SEAS, GULFS, &c.—The Caspian Sea and the Persian Gulf wash the shores of Persia. The Caspian is an inland body of water, and has no communication with the ocean: the Persian Gulf communicates with the Indian Ocean by the Strait of Ormuz and the Gulf of Omaun.

The Strait of Ormuz derives its name from the small island of Ormuz, which lies near the coast of Persia. Ormuz is naturally a barren rock, but in the sixteenth and early part of the following century, when in the possession of the Portuguese, it was the chief emporium of the commerce of the East.* Kishm, an island of much larger size, lies to the west of Ormuz.

MOUNTAINS AND PLAINS.—The interior of Persia is a plateau, elevated from three to four thousand feet above the sea, and bordered on three sides—the north, west, and south—by mountain-chains. These mountains divide the elevated interior from the low country which lies along the Caspian Sea, the Persian Gulf, and the banks of the Tigris.

Mount Demavend, in the north of Persia, and not far from the southern shore of the Caspian Sea, is nearly 15,000 feet in height. The mountains of Elwund (ancient Orontes), near the western border, reach 11,500 feet; some of the lofty summits in the north-western province, Azerbijaun, reach a greater height. Azerbijaun is the most rugged portion of Persia; it forms a succession of table-lands, mountain-peaks, and intervening valleys, and has a cooler temperature than other parts of the country.

* "High on a throne of royal state, which far
Outshone the wealth of Ormus or of Ind."—PARADISE LOST, b. ii.

Part of the interior plateau is a region called the *Great Salt Desert*. This is an arid tract, the soil of which is largely impregnated with particles of salt.

RIVERS AND LAKES.—Persia has no large rivers of its own. The Aras forms part of its north-western frontier; the Euphrates, immediately above its entrance into the Persian Gulf (during the last thirty miles of its course), constitutes the line of division between Persia and Turkey.

The other rivers of Persia are the Kerkhah, Karoon, and Sefeed-rood. The two former join the Euphrates: the Sefeed-rood flows into the Caspian Sea. The smaller rivers of Persia, flowing towards the interior, are either absorbed in its arid plains, or are received into salt-water lakes.

The largest lake is Ooroomiyah, in the north-western province, and the water of which is intensely salt. Lake Bakhtegaun, in the more southern interior, has also salt water.

CLIMATE AND PRODUCTIONS.—The climate of Persia exhibits great extremes. The interior plateaus are alternately parched by the fiercest heat of summer, and swept by the cold winds of the opposite season. The lower plains, along the Caspian Sea and the Persian Gulf, are intensely hot. The shores of the Persian Gulf, indeed, are among the hottest regions in the world, and the power of the sun's rays, reflected from the arid surface of rock and sand, is, during some months of each year, scarcely endurable. The mountain-valleys, lying among the successive terraces by which the interior is reached from the coast, or from the plains of the Tigris, possess a delightful and equable climate, and are the most fertile portions of Persia.

In these elevated valleys, watered by numerous running streams, such fruits as the vine and the fig, the water-melon and the peach, abound; a rich vegetation clothes the sides of the hills, and a carpet of wild-flowers (many of them such as constitute the choicest ornaments of our gardens, as the narcissus, the iris, and the asphodel,) covers the ground. The interior plains are arid and comparatively unproductive, yielding only saline plants and grasses.

POPULATION AND INDUSTRIAL PURSUITS.—Persia has about ten millions of inhabitants. About a fourth-part of them are a people called Iliyats, whose habits are pastoral. They dwell principally in tents, finding summer pastures for their flocks upon the mountain-side, and returning to the lower plains

during the season of winter. Camels, horses, and sheep constitute the wealth of the Iliyat.

There are few manufactures. Those of carpets, shawls, embroidered silks, sabres, and fire-arms, are the most important. The commerce, carried on by caravans, is considerable.

DIVISIONS AND TOWNS.—Persia includes the following provinces :—

<i>Provinces.</i>	<i>Towns.</i>	<i>Provinces.</i>	<i>Towns.</i>
IRAK	Teheraun, Ispahaun, Hamadaun.	FARS	Shiraz, Bushire.
AZERBIJAUN	Tabreez.	LARISTAUN	Lar.
GILAUN	Resht.	KERMAUN	Kermaun, Gombroon.
MAZANDERAUN ..	Saree, Balfroosh.	LURI-TAUN	Khorratabad.
KHORASSAUN	Mushed.	KHUZISTAUN	Shooster, Dizfool, Mo- hammerah.

Teheraun, in the northern part of Irak, is the modern capital of Persia, but *Ispahaun* is of larger size, and of greater commercial importance. *Ispahaun*, however, has declined from the splendour which it once possessed. *Hamadaun* represents the Achmetha of the Bible (Ezra vi. 2).

Tabreez, the chief city of Azerbijaun, lies not far distant from the shores of the salt lake of Ooroomiyah. The province of Azerbijaun was the original seat of the ancient fire-worshippers of Persia, and it still exhibits numerous remains of the early fire-temples. The towns of *Resht* and *Balfroosh*, situated within the hot and low plains that border on the Caspian, command the chief commerce of that sea.

Shiraz is the chief city of Fars, the most fertile province of Persia, and the original seat of the Persian monarchy. Shiraz enjoys a delightful climate, and is the centre of considerable trade. *Bushire*, on the Persian Gulf, is the chief seat of the foreign commerce of Persia. *Gombroon*, at the entrance of the gulf, belongs to the Sultan of Muscat.

Not far distant from Shiraz are the remains of the ancient Persepolis, the capital of the Persian monarchy in the age of Alexander the Great. These remains now bear the name of *Istakr*.

Shooster and *Dizfool*, the chief cities of Khuzistaun—the south-western province of Persia—are of some commercial importance. Shooster stands on the river Karoon; Dizfool on a tributary of that stream. *Mohammerah*, at the junction of the Karoon with the Euphrates, has been growing in commercial importance during recent years. A few miles to the

south-west of Dizfool is the mound of Soos, which marks the site of the ancient city of Susa, the Shushan of Scripture (Dan. viii. 2). Huge mounds, and other remains of the works of man in a former age, situated in the midst of tracts now desolate, are found in various parts of Khuzistaun, and reveal the same picture of decay which characterises every part of western Asia.

GOVERNMENT, &c.—The government of Persia is a despotic monarchy, the sovereign being entitled the *Shah*. The people are Mohammedans in religion, but are followers of the Sheeite sect, on which account deep and mutual antipathy prevails between themselves and the Turks.

AFGHANISTAN AND BELOOCHISTAN.

SITUATION, BOUNDARIES, AND EXTENT.—Afghanistan and Beloochistan adjoin Persia to the eastward. They occupy the eastwardly and smaller division of the same plateau-region.

Afghanistan is bounded on the north by Turkestan, on the east by British India, on the south by Beloochistan, and on the west by Persia.

Beloochistan is bounded on the north by Afghanistan, on the east by British India, on the south by the Indian Ocean, and on the west by Persia.

The area of the two countries is perhaps together little short of 400,000 square miles.

MOUNTAINS.—The chief part of Afghanistan consists of rugged mountains, with intervening plains and valleys. The highest mountains are the Hindoo-Koosh, on the north-eastern border, which reach 20,000 feet in elevation. The Soleimaun Mountains, on the east, divide Afghanistan from the low plains that border the Indus: their highest summit, called Takht-i-Soleimaun* is 12,000 feet. The Hala Mountains, further south, are on the east border of Beloochistan.

* That is, *throne of Solomon*. The names of Solomon, David, Alexander, and Nimrod, are numerous scattered over these countries: the localities to which they are attached are generally the scenes of wild and superstitious legends, in which genii and sorcerers figure as agents.

Two famous mountain-passes lead from the high plateaus of Afghanistan to the valley of the Indus. These are the Khyber Pass and the Bolan Pass, which form the great roads by which India is entered from the westward.

RIVERS AND LAKES.—The chief rivers of Afghanistan are the Caubool and the Helmund. The Caubool flows east, and joins the Indus: the Helmund has a south-westerly course, and terminates in the salt lake of Zurrah, which has no outlet. Beloochistan is scantily watered, and great part of it forms an arid wilderness.

CLIMATE AND PRODUCTIONS.—The climate of both these countries is distinguished by intense extremes of heat and cold. At Furrah, in Afghanistan, it is said that the mid-day heat renders eggs hard, and makes balls of lead malleable. Yet the winter of Caubool is intensely severe, and the streams are frozen sufficiently hard to bear loaded camels. The natural productions are like those of Persia, and the ground yields abundance of fruits and grain wherever water is sufficiently plentiful.

POPULATION AND INDUSTRY.—Afghanistan has perhaps five millions of inhabitants, and Beloochistan about one million and a half. The Afghauns (as the people of the first named country are called) are a bold and hardy race of mountaineers, owning no sovereignty but that of the chiefs of the different tribes into which they are divided. They are often engaged in warfare. Many of them lead, in part, a wandering life, dwelling in tents during a portion of the year. The Belooches are also rude and warlike. Both nations are devoted in great measure to pastoral pursuits. There is little of manufacturing industry, but a considerable amount of transit trade passes through Afghanistan, owing to its intermediate position between India and the countries of Western Asia.

DIVISIONS AND TOWNS.—The three chief towns of Afghanistan are Caubool, Candahar, and Herat, and each of these is the capital of an independent principality, under a native Khan, or ruler.

Caubool is situated on the river of the same name, which joins the Indus. The line of the Khyber Pass forms part of the road leading from Caubool to the banks of the Indus. *Ghiznes* is a city of some historic interest (though now decayed), to the south-west of Caubool.

Candahar stands beside one of the tributaries of the river Helmund, in a more southern portion of Afghanistan. The

town of *Heraut* is within the westerly division of the country, near the Persian frontier.

The chief town of Beloochistan is *Kelat*, in the eastern portion of that country. The line of the Bolan Pass lies through the north-eastern extremity of Beloochistan, and leads thence into Afghanistan.

GOVERNMENT, &c.—Both in Afghanistan and Beloochistan the government is patriarchal. The people are divided into tribes, or clans, and own in general only the sovereignty of their own chiefs. Sometimes the various tribes are united under a common sovereignty, but such union is seldom of lengthened endurance. The people of both countries are followers of the Mohammedan religion.

QUESTIONS ON PERSIA AND AFGHANISTAN.

1. How is Persia bounded? What seas wash its shores?
2. Where is the island of Ormuz, and for what is it noteworthy?
3. What kind of formation does Persia exhibit, as to its physical geography?
4. Name some of the mountains that are within Persia. Which of its provinces is the most mountainous?
5. Where is the Great Salt Desert? Point it out upon the map.
6. What rivers belong to Persia? Into what do they flow?
7. What two lakes does Persia include? Are their waters fresh or salt?
8. What kind of climate has Persia? Which parts of the country are most advantageously situated in this regard?
9. What fruits and flowers belong to the watered districts of Persia?
10. Among the inhabitants of Persia are a people called *Iliyats*: What are their habits?
11. Into how many provinces is Persia divided? Name as many as you can of the number.
12. What city forms the capital of Persia? Point to its place on the map.
13. In what provinces are the cities of *Ispahau*n, *Hamadaun*, *Tabreez*, *Bal-froosh*, and *Mushed*?
14. By what circumstance is the province of *Azerbijaun* distinguished?
15. In which province are *Shiraz* and *Bushire*? For what is *Bushire* noteworthy?
16. Of what ancient city are the remains found not far distant from *Shiraz*? For what was this city distinguished?
17. What three places are within the province of *Khuzistaun*? Which of them stands at the junction of the *Karoon* river with the *Euphrates*?
18. Of what ancient city are the remains found near *Dizfool*?
19. Under what form of government is Persia? How is the sovereign entitled?
20. Where are Afghanistan and Beloochistan? Point out upon the map the boundaries of each.
21. What kind of country is Afghanistan, as to its natural features? By what mountains is it bordered to the eastward?
22. What two mountain passes lead from Afghanistan to the valley of the *Indus*?
23. What rivers has Afghanistan? Into what do they flow?
24. By what is the climate of Afghanistan distinguished?

25. By what habits of life are the people of Afghanistan and Beloochistan distinguished?
 26. Name the three chief cities of Afghanistan, pointing out their places on the map.
 27. What is the chief town of Beloochistan? Point to it on the map.
 28. What kind of government prevails in these countries? What form of religion?
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INDIA.

SITUATION, BOUNDARIES, AND EXTENT.—India is a large country of southern Asia. It reaches from the Himalaya Mountains to Cape Comorin, and from the river Indus to the head of the Bay of Bengal. The Himalaya Mountains bound India on the north; the empire of Burmah and the Bay of Bengal upon the east; Afghanistan, Beloochistan, and the waters of the Indian Ocean, upon the west. Upon the south it terminates in Cape Comorin, a conspicuous headland which fronts the waters of the Indian Ocean. The southwardly portion of India forms a peninsula, of triangular shape.

India embraces an area of 1,200,000 square miles, a magnitude which is ten times greater than that of Great Britain and Ireland united, and which exceeds, by upwards of twenty times, the dimensions of England and Wales.

MOUNTAINS AND PLAINS.—The chief mountain-chains of India are the Himalaya, the Ghauts, and the Vindhya Mountains. The Himalaya are by much the most important, and they include the highest elevations upon the surface of the globe.

The Himalaya Mountains stretch in a well-defined line along the northern border of India, dividing that country from the table-land of Tibet. Their highest summit is Mount Everest, the summit of which is 29,000 feet above the level of the sea. All the higher parts of the Himalaya are covered with perpetual snow. To the south of the Himalaya is a vast and fertile lowland plain: this is called the plain of Hindoostan. The peninsular portion of India is to the south of this plain.

The Ghauts extend along the western coast of India, lying close to the shores of the Indian Ocean. Their highest summits do not exceed 8000 feet. A succession of detached portions of high ground which extend along the eastern side of the peninsula are called the eastern Ghauts.

The Vindhya Mountains lie in the direction of east and

west, along the north side of the peninsular portion of India. Their height is moderate, seldom exceeding 3000 feet.

India thus embraces two great divisions—the north, which is an extensive lowland plain: the centre and south, which form a plateau, bordered by mountains of moderate altitude. The plain of Northern India is distinguished as *Hindoostan*: the centre and south constitute a region known as *The Deccan*. The table-land of the Deccan is elevated from three to four thousand feet above the sea.

The western side of the peninsular portion of India is called the Malabar Coast: the eastern side is distinguished as the Coromandel Coast.

RIVERS.—The two chief rivers of India are the Ganges and the Indus. They derive their waters from the Himalaya region, and flow through the great plain of Northern India. The Ganges has a south-east course, and enters the Bay of Bengal: the Indus flows south-west, and discharges into the Indian Ocean.

Both the Ganges and the Indus have numerous tributaries. The chief tributaries of the Ganges are the Jumna, Gogra, and Sone. The Indus is joined, about five hundred miles above the sea, by a stream called the Punj-nud, which brings the collected waters of five tributary rivers. The district through which these five rivers flow is called the Punjaub—that is, the country of the five rivers. The names of these are Jeloum, Chenaub, Ravee, Beyas, and Sutlej.*

Among the other considerable rivers of India are the Brahmapootra, Mahanuddy, Godavery, Krishna, and Cauvery—all of which flow into the Bay of Bengal; and the Nerbudda and Tapti—which enter the Indian Ocean. The Brahmapootra divides into several channels in its lower course, and some of these unite with the similar channels of the Ganges.

There is an extensive tract of country in the north-west of India (between the course of the Jumna on the one side and the lower Indus on the other) which is without any perennial streams, and hence exhibits a generally arid surface. This is called the Great Indian Desert.

CLIMATE AND PRODUCTIONS.—The climate of India is hot,

* These rivers were known in ancient geography as the Hydaspes, Acesines, Hydraotes, Hyphasis, and Zaradrus (or Hesudrus). The Greeks, under Alexander, penetrated this part of India, and encountered the native monarchs of the Punjaub.

excepting only in the higher mountain-regions, where a cool temperature results from elevation above the sea. These elevated tracts are accordingly resorted to for sanitary purposes. The lower slopes of the Himalaya, in the north of India, the Ghauts, off the western coasts of the peninsula, and the region of the Neilgherry Hills, in the south, are well known for their cool atmosphere and their refreshing breezes. In like manner, the mountain-district in the interior of Ceylon, though only a few degrees distant from the equator, enjoys a cool and invigorating temperature.

The seasonal changes in India are those from rain to drought, and the reverse. These changes are intimately connected with the monsoons, or periodical winds, which prevail throughout southern Asia.* The monsoons bring rain or drought, alternately, to the plains of India, according as they have passed over the ocean, or over inland regions. On the Malabar coast, the south-west monsoon (which blows from April to September) is accompanied by rain, which falls in torrents along the whole seaward face of the Ghauts. Upon the Coromandel coast, on the other hand, the north-east monsoon (October to March) is accompanied by rain. But the eastern side of India is generally hotter, and more arid, than the western coasts of the peninsula. These changes of the monsoons regulate in great measure the habits of life of the Indian population.

The natural productions are rich and varied. The gold and gems for which India is traditionally celebrated are of less real value than the coal and iron which are found extensively diffused through large portions of the country. Good coal is worked to the north-westward of Calcutta, and iron is worked in many localities. Tin, copper, and other metals, also occur.

The vegetable produce is of high value. India supplies all, or nearly all, the fruits and other plants mentioned as belonging to southern Asia in general. Vast forests of teak and other trees clothe the seaward face of the Ghauts, and forests extend from the plains of northern India far up the declivities of the Himalaya. The least productive part of India is the region known as the Great Indian Desert, and the neighbouring tract entitled the Runn of Cutch. The latter is alternately an arid and sandy waste, or a vast swamp, with the seasons of drought and moisture.

* See page 154.

POPULATION AND INDUSTRY.—India has nearly 170,000,000 of inhabitants. A hundred and twenty millions of these are subjects of Britain, and the great bulk of the remainder, though under various native sovereignties, are virtually under the controlling power of Britain.

Vast as is the population of India in numerical amount, India is yet less populous (relatively to size) than most countries of Europe. Some parts of the country are much more populous than others. The provinces on the lower Ganges are the most densely populated; those in the north-west of India the least so.

The great mass of the people of India (six-sevenths of the whole) belong to the Hindoo race, the various families of which, however, exhibit many points of difference. The inhabitants of the provinces that border on the lower Ganges are of small stature and slender frame: those of the more inland provinces are a people of larger proportions and greater strength. There are, besides, settled in various parts of India, and intermingled with the Hindoo population, descendants of Arabs, Armenians, Afghans, Turks, and Abyssinians; together with Parsees, Jews, and people of various European nations (principally British). The Parsees, who are confined to the city of Bombay, and a few places in the immediate vicinity, are descended from the ancient fire-worshippers of Persia.

The Hindoos are uniformly followers of the Brahminical religion, worshipping the Hindoo trinity, of which Brahma, Vishnu, and Seva, are the members. The division into castes is one of their most characteristic social usages. Of that portion of the population of India which is not included among the worshippers of Brahma, by far the greater number are Mohammedans. The total number of Mohammedans is probably not much less than twenty millions.

The industry of India is chiefly agricultural. Rice is the principal article of food consumed by the great mass of the population, who live mostly upon vegetable diet—not less from its superior economy and from the natural influences of the climate than from religious prejudices in its behalf.* The

* It is a mistake to suppose, as is commonly the case, that the Hindoos abstain altogether from animal food. The ox is sacred, and its flesh is never touched, and the flesh of swine is regarded with horror both by the Brahmin and the Mohammedan. But mutton is eaten without hesitation, and fish is largely consumed, whenever it is cheaply obtainable. In all hot countries,

culture of the poppy—for the purpose of extracting opium—is very extensively pursued in some of the provinces within the valley of the Ganges, and also on the plateau of Malwa, to the northward of the Vindhya Mountains. Indigo, cotton, the sugar-cane, the coffee-plant, and the mulberry, are the objects of culture in various parts of India.

Fine silk and cotton fabrics, with shawls and various articles of ornamental attire, constitute the chief produce of Indian manufacturing skill. But the import of manufactured goods (principally from Britain), and the export of raw produce—chiefly opium, indigo, cotton, and rice—are the distinguishing features of Indian commerce. The opium is supplied to China, by the population of which country it is extensively consumed.

DIVISIONS.—This immense country is chiefly under British government. Three-fifths of the whole vast region lying between the Himalaya Mountains and Cape Comorin come under the appellation of **BRITISH INDIA**, and are subject to the direct rule of authorities appointed by the British Crown. Of the remaining two-fifths, the far larger portion is divided between various native sovereignties, which are subject in greater or less degree to British influence and control: these are called the **PROTECTED STATES**. There are, in addition, three native states, which are nominally independent of Britain: these last are distinguished as the **INDEPENDENT STATES**.

Prior to the year 1858, all the provinces of British India that are situate on the mainland were under the rule of the East India Company—a body of merchants originally incorporated in the reign of Queen Elizabeth—subject only to a limited control on the part of the Crown. But in that year the political functions of the company were terminated by Parliament, and the whole of their vast dominions brought under the direct authority of the British Crown.

however, vegetable diet is preferred by the mass of the people. The Greenlander, who consumes twelve pounds weight of meat in a day, and the Hindoo, whose chief nutriment is derived from rice, act in each case upon the instinctive impulses that are always associated with climate and other conditions of physical geography.

1.—BRITISH INDIA.

TOWNS, &c.—British India is divided into three Presidencies—Bengal, Bombay, and Madras. The Presidency of Bengal is first in magnitude and importance.

The **BENGAL PRESIDENCY** stretches through the whole length of the valley of the Ganges, from the head of the Bay of Bengal to the point where the river issues from the snowy region of the Himalaya. It embraces, besides, the large province of the Punjaub, watered by the upper Indus and its tributaries; together with Nagpore, in the central plateau of the Deccan. The province of Cuttack, at the outlet of the Mahanuddy, is also within its limits. The provinces on the lower Ganges are the most populous and productive portions of India.

The divisions of the Bengal Presidency, with the principal towns in each, are enumerated below:—

<i>Provinces.</i>	<i>Towns.</i>
BENGAL PROPER,.....	Calcutta, Dacca, Moorshedabad, Plassey.
BAHAR,.....	Bahar, Patna.
BENARES,.....	Benares, Mirzapore.
OUDE.....	Lucknow, Fyzabad.
ALLAHABAD.....	Allahabad, Cawnpore.
AGRA.....	Agra.
DELHI.....	Delhi, Meerut.
ROHILCUND.....	Bareilly.
KUMAON.....	Almora.
THE PUNJAB.....	Lahore, Amritsir, Mooltan, Peshawur, Simla.
NAGPORE.....	Nagpore.
CUTTACK.....	Cuttack, Pooree (or Juggernaut).

Calcutta is the capital of British India. It stands on the east bank of the river Hooghly (the principal arm of the Ganges), at a distance of a hundred miles from the sea. Calcutta has half a million of inhabitants, and, besides its political importance, has also a large amount of trade, both foreign and inland. The navigation of the Hooghly is dangerous, but its channel is nevertheless a busy highway of commerce, frequented by vessels of all sizes and of various nations. *Plassey*, to the northward of Calcutta, was the scene of Clive's great victory in 1757.

All the great cities of this part of India are situated either on the Ganges or its various tributary streams, and the great line of communication with the interior follows the course of the river. *Patna*, on the south, and *Benares*, on the north bank of the Ganges, are two of the largest among the inland India, and the latter, as one of the sacred cities of the

Hindoos, possesses numerous temples, the crowded resort of the devotees of Hindoo worship. *Allahabad* is at the junction of the Jumna and Ganges. *Lucknow*, memorable for the defence of the British Residency during the Sepoy insurrection of 1857-8, is on the river Goomtee, one of the many affluents of the Ganges. *Cawnpore* is on the right bank of the Ganges: *Agra* and *Delhi* are both upon the right bank of the Jumna. Delhi is historically noted as the former capital of the Mogul empire (which in the sixteenth and seventeenth centuries embraced nearly the whole of India), and has acquired more recent fame from its siege by the British in 1857.

Lahore, the chief city of the Punjaub, stands on the river Ravee—one of the five tributaries of the Indus. It is noteworthy as the former capital of the Sikhs, or native population of this part of India. *Mooltaun* is on the river Chenaub. *Peshawur* is situated to the west of the Indus, and not far distant from the entrance of the Khyber Pass.*

The town of *Simla*, situated a few miles south of the upper Sutlej (within a district which adjoins the eastern extremity of the Punjaub, and is politically attached to that territory), has within a recent period become a much-frequented place of resort for sanitary purposes, and is the frequent residence of the Governor-Generals of India. It lies at an elevation of 7800 feet above the sea, and enjoys an atmosphere which is free from the heat experienced in the lower plains.

The BOMBAY PRESIDENCY, which is the smallest of the three, is wholly on the western side of India. It includes the following provinces and towns:—

Provinces.	Towns.
THE CONCAN	Bombay, Surat.
POONAH	Poonah.
SATTARA	Sattara.
KANDEISH (part of)	Malligawm.
GUZERAT (part of)	Baruche, Ahmedabad.
SINDE	Hyderabad, Shikarpore, Kurachee.

The city of *Bombay*, the capital of the Presidency, is situated upon the Island of Bombay, which closely adjoins the coast. Bombay has an excellent harbour, one of the best in India, and commands a large amount of foreign trade. It is historically noteworthy as one of the earliest English possessions in the East, having been part of the wedding-dowry given to Charles II. with his Portuguese bride, Catherine of Braganza,

* See page 179.

in 1661. *Surat*, to the north of Bombay, is at the mouth of the Tapti river. *Buroche*, further north, is on the Nerbudda. *Poonah* and *Sattara* lie to the eastward of the Ghauts, on the table-land of the Deccan.

The large province of *Sinde* extends over both banks of the lower Indus. The most important place in this province is the rising port of *Kurachee*, a short distance west of the mouths of the Indus. *Hyderabad* is on the east bank of the Indus: near it is the village of *Meanee*, where Sir Charles Napier gained his famous victory in 1843.

The **MADRAS PRESIDENCY** embraces a large part of central and southern India, including both the eastern and western shores of the peninsula, besides an extensive portion of the interior plateau. Its provinces and towns are as follow:—

Provinces.	Towns.
THE CARNATIC.....	Madras, Arcot, Tranquebar, Tanjore, Trichinopoly, Madura.
THE CIRCARS	Masulipatam, Coringa.
COIMBATORE	Coimbatore, Ootacamund.
MALABAR	Calicut, Cananore.
CANARA	Mangalore.

The city of *Madras*, the capital of the Presidency, is on the Coromandel coast. It is destitute of any harbour, the sea in front being merely an open roadstead. The commerce which it enjoys is, nevertheless, very considerable. The eastern coast of India is nearly devoid, throughout its entire length, of shelter for shipping, while the western (or Malabar) coast abounds in good natural harbours. *Masulipatam* and *Coringa* are to the north of Madras—the former near the mouth of the Krishna river, the latter at the outlet of the Godavery. *Tranquebar* is a seaport near the mouth of the river Cauvery, to the south of Madras: *Arcot*, *Tanjore*, *Trichinopoly*, and *Madura*, are inland cities.

The small province of *Coimbatore*, which is wholly inland, has on its northern border the group of the Neilgherry Hills, which (like Simla in northern India) are resorted to for the sake of their cool and refreshing breezes.

The provinces of *Malabar* and *Canara* are upon the western side of the peninsula, stretching along the seaward face of the Ghauts. *Calicut*, *Cananore*, and *Mangalore*, are flourishing seaports, but the first-named of them has fallen from the importance which belonged to it in a former day.

2.—THE PROTECTED STATES.

The Protected States of India, which are under various forms of native sovereignty (the ruler bearing, in most cases, the title of Rajah), are enumerated in the following list :—

<i>State.</i>	<i>Towns.</i>	<i>State.</i>	<i>Towns.</i>
HYDERABAD	Hyderabad, Aurungabad.	GWALIOR.....	Gwalior, Oojein.
MYSORE	Mysore, Seringapatam, Bangalore.	BHOPAUL.....	Bhopaul.
COCHIN	Cochin.	GUZERAT.....	Baroda, Cambay.
TRAVANCORE	Trivandrum.	CUTCH.....	Bhooj.
KOLAPORE.....	Kolapore.	RAJPOOTANA.....	Oodeypore, Jhodpore, Bikaner.
SAWUNT-WARREE.....	Sawunt-Warree.	BAHAWALPORE...	Bahawalpore.
INDORE.....	Indore.	HILL STATES.....	Kanum, Nahun.
		SIKKIM	Tumlong.

The most extensive of these territories is Hyderabad, the ruler of which bears the title of Nizam. It is wholly inland, comprising great part of the table-land of the Deccan. Not far distant from Aurungabad, in the north-west part of this territory, is the small town of *Assaye*, where the Duke of Wellington (then Sir Arthur Wellesley) gained one of his splendid victories, in 1803.

The State of Mysore, which is also inland, is surrounded by the territories of the Madras Presidency. The city of *Seringapatam*, seated on an island in the Cauvery river, played a distinguished part in the wars of the last century, when it was the capital of Hyder Aly's extensive dominions. Under his son and successor, Tippoo Saib, it was stormed by the British in 1799.

The native State of Guzerat, ruled by a sovereign styled the Guicowar, embraces the peninsula lying between the Gulfs of Cutch and Cambay.

Rajpootana, in the north-western part of India, is the name given to an extensive tract of country, within which are embraced numerous small States, ruled by native rajahs.

The Hill States, in the extreme north of India, include several small territories, situated among the rugged declivities of the Himalaya mountain-region, and border on the limits of eternal snow.

3.—THE INDEPENDENT STATES.

These, now reduced to three in number, are as follow :—

<i>States.</i>	<i>Towns.</i>
CASHMERE.....	Serinuggur (or Cashmere), Islamabad.
NEPAUL	Khatmandoo, Ghoorka.
BOOTAN	Tassisudon.

Cashmere includes the celebrated valley of that name, which lies between some of the highest ranges of the Himalaya system, and is watered by the upper course of the river Jeloum. Its breed of goats affords the fine hair which is woven into the celebrated Cashmere shawls. The territories of Nepaul and Bootan—further to the eastward, and divided from one another by the little intervening State of Sikhim—stretch along the southern slopes of the Himalaya, and include a highly-diversified range of country.

Besides the English, two other European nations—the French and the Portuguese—possess a few stations in India, of exceedingly trifling note, both as to size and commercial value.

To the FRENCH belong—*Pondicherry*, a seaport town lying to the south of Madras; *Mahé*, on the Malabar coast (a few miles north of Calicut); and *Chandernagore*, a small town on the Hooghly River, north of Calcutta. These are the remains of a power which long contested with Britain the sovereignty of India.

The PORTUGUESE possessions consist of *Goa*, a small territory lying on the west coast of India, between the limits of the Bombay and Madras Presidencies; the port of *Damaun*, to the north of Bombay; and the town and port of *Diu*, situated on an island off the south coast of Guzerat. The city of Goa was long a splendid emporium of commerce, the chief mart of the Eastern world, but its importance has wholly passed away.

ISLANDS.—The large island of CEYLON, lying to the south of India, belongs to Britain. It is not attached to either of the presidencies on the Indian mainland, but forms a distinct colony, under the authority of the British Crown.

Ceylon is 24,600 square miles in area, or about three-fourths the size of Ireland. The interior of the island is a high mountain-region, the loftiest summits of which exceed 8000 feet: a broad belt of lowland extends around the coast. Numerous rivers water its plains and valleys.

Ceylon possesses a fine climate, and an abundance of rich

natural produce. Its extensive forests (through which numerous herds of elephants yet roam) are composed of trees which yield timber of the highest value, as the teak, ebony, rose-wood, satin-wood, and others. But the most characteristic products of the island are the cinnamon-plant and the cocoa-nut palm. Our chief supply of cinnamon is derived thence.

Ceylon has upwards of a million and a half of inhabitants. These are called the Singalese; they differ in some respects from the people of the Indian mainland, and are worshippers of Boodh. The chief town of the island is *Colombo*, on the western coast. *Trincomalee*, a flourishing seaport, with an excellent harbour, is on the north-east side of the island. *Kandy*, formerly the native capital, is in the interior.

The groups of the Laccadive and Maldive Islands lie in the Indian Ocean, to the westward of India. The former are surrounded by coral reefs, and the Maldive Islands are wholly composed of coral—scarcely rising above the level of the surrounding waters. The cocoa-nut is the chief article of produce in either group.

The Andaman Islands are in the eastern part of the Bay of Bengal: they have recently been occupied by the British Government, and are used as a convict-settlement for the Indian rebels, captured during the late insurrection. The Nicobar Islands are further to the southward.

QUESTIONS ON INDIA.

1. How is India bounded? In what cape does it terminate to the southward?
2. What is the area of India? What proportion does this bear to the magnitude of England and Wales?
3. What mountain chains belong to India? Point out their direction and extent upon the map.
4. What portion of India is distinguished as the Deccan, and what kind of country is it as to natural features?
5. By what names are the opposite coasts of India distinguished? Point to each upon the map.
6. Name the two chief rivers of India, and point to their places on the map. Into what seas do they flow?
7. In what part of India is the district known as the Punjab? Why is it so called?
8. What other rivers belong to India? Into what seas do they flow?
9. Where is the Great Indian Desert? Point to its place on the map.
10. What kind of climate has India? By what are its seasons distinguished?
11. Mention some among the natural productions of India, mineral and vegetable.
12. Where is the tract known as the Rumm of Cutch? What kind of country is it?

13. To what number does the total population of India amount? Which parts of the country are most populous?
14. Besides Hindoos, what other races are included amongst the population of India?
15. Of what form of religion are the great majority of the Hindoo people followers?
16. Give some particulars concerning the industrial productions of the Hindoo population.
17. How is India divided? What proportion of the whole comes under the designation of British India?
18. Point on the map to the portion of India which constitutes the Bengal Presidency, and enumerate as many as you can of the provinces which it embraces.
19. Upon what rivers are Calcutta, Benares, Allahabad, Lucknow, Cawnpore, and Agra situated?
20. Where is Plassey, and for what is it noteworthy?
21. For what is Delhi celebrated? On what river does it stand?
22. In what part of India are Lahore, Mooltaun, and Peshawur? Point out their places on the map.
23. Where is Simla, and for what is it noteworthy?
24. What provinces of India are included within the Bombay Presidency? Point on the map to the general limits of this Presidency.
25. Where is the city of Bombay? By what is it historically distinguished?
26. Where are Poonah, Sattara, Surat, and Baroche? Find them out upon the map.
27. Where is the Province of Sind? What place constitutes its chief port?
28. Over what part of India does the Madras Presidency extend? Name some of the provinces that are within its limits.
29. Where is the city of Madras? What kind of site does it occupy?
30. Where are Arcot, Masulipatam, Tranquebar, Trichinopoly, and Tanjore? Point them out upon the map.
31. Where is the tract of the Neilgherry Hills? For what is it noteworthy?
32. Where are Calicut, Cananore, and Mangalore?
33. Enumerate as many as you can of the Protected States of India.
34. In which of the above States are the towns of Aurungabad, Bangalore, Trivandrum, Gwalior, and Baroda, respectively?
35. In what State is Seringapatam? On what river is it?
36. By what title is the sovereign of Hyderabad known? By what the ruler of Guzerat?
37. How many of the Indian States rank as Independent? Name them.
38. Point on the map to the locality of Cashmere. For what branch of industry is it noted?
39. What two other nations, besides Britain, possess territories in India? Name some of the possessions of each.
40. Give a brief account of the natural features of Ceylon. What two articles constitute its most characteristic products?
41. Point on the map to the places of the following :—Colombo, Trincomalee, the Laccadive Islands, the Maldiv Islands, and the Andaman Islands.

INDO-CHINESE COUNTRIES.

SITUATION, &c.—INDIA-BEYOND-THE-GANGES (or the Indo-Chinese peninsula) forms the south-easterly division of the Asiatic continent. It embraces the extensive peninsula which

extends from the Bay of Bengal on the west to the China Sea on the east, and which stretches to the southward into the smaller and more elongated Malay peninsula.

Three distinct countries are comprehended within this region, besides several territories which are under the sovereignty of Britain. The three countries are—the Empire of Burmah, the Kingdom of Siam, and the Empire of Anam. BURMAH embraces part of the interior, towards the western side of the peninsula: SIAM includes its middle portion, with the shores of the Gulf of Siam: ANAM, or Cochin-China, is its eastwardly division. In climate and productions these countries have many points in common, and they are inhabited by a race which is in all essential respects the same.

MOUNTAINS AND PLAINS.—Ranges of high ground, lying in the general direction of north and south, with long river-valleys between, form the characteristic features of the Indo-Chinese peninsula. These are connected, to the northward, with the high region that adjoins the eastern extremity of the Himalaya and the neighbouring provinces of China.

There are three extensive plains in this region—the Plain of Pegu, the Plain of Siam, and the Plain of Tonquin. The Plain of Pegu adjoins the Gulf of Martaban—an off-set of the Bay of Bengal: the Plain of Siam lies at the head of the Gulf of Siam, which is an arm of the China Sea: the Plain of Tonquin adjoins the Gulf of Tonquin, which is a more northerly arm of the China Sea.

RIVERS.—The Indo-Chinese peninsula has four great rivers—the Irawady, Saluen, Meinam, and Mekon. The Irawady and Saluen flow into the Gulf of Martaban; the Meinam into the Gulf of Siam; and the Mekon into the China Sea.

CLIMATE AND PRODUCTIONS.—Throughout the Indo-Chinese countries the climate is hot, especially so in the low grounds near the coast, where the air is often unhealthy. The rains are very abundant, but are confined to a brief season of the year. As in India Proper, the changes of the seasons depend upon the monsoons. In the long and narrow region of the Malay peninsula, the heat of the Torrid Zone is tempered by the influence of the seas on either side, and the climate of Singapore, at its southward extremity, is not so hot as that of Madras.

In all these countries, the productions of the vegetable kingdom are of the highest value. The forests comprehend

many valuable kinds of wood, and various drugs, spices, and gums are native to this region. The mineral wealth is also considerable, and gold is extensively employed in Siam for purposes of architectural adornment and numerous other uses.

POPULATION AND INDUSTRY.—Burmah is believed to contain about three millions of inhabitants; Siam between five and six millions; and Anam about thirteen millions. So that the entire region perhaps comprehends about twenty-two millions of inhabitants. The Indo-Chinese are a race bearing more resemblance to the Chinese than to the people of India. They are more robust in frame than the Hindoos, but are short in stature, compared to the European type. Their skin is of a dark sallow brown, or olive colour.

The industry of these countries is principally agricultural. Rice is the prime article of food. The sugar-cane is extensively grown, especially in Siam. The mulberry is also an object of extensive culture, for the sake of the silk-worm, which is largely reared in Cochin-China and Tonquin. Cotton, indigo, and tobacco, are grown; but the produce of these and other articles of tropical growth is due rather to the spontaneous fertility of the soil than to any skill bestowed upon their culture.

A large amount of trade is carried on by the people of Siam and Cochin-China. The Chinese are the chief agents in this traffic. Great numbers of Chinese are settled in the cities of Siam and Cochin-China, and the maritime traffic of south-eastern Asia (both insular and continental) is chiefly in their hands. The English commerce with these countries has been extending of late years, especially in the case of Siam.

GOVERNMENT, &c.—The native governments of all these countries are despotic, and the condition of the people is, in most respects, one of semi-barbarism. The most abject and servile submission is exacted from the inferior ranks by their superiors of every grade. The punishment of offences is marked by extreme severity, as, indeed, is the case in all Asiatic countries. The Buddhist worship uniformly prevails, and its rites are celebrated with great pomp and display. The temples are gorgeously decorated, and there is much of barbaric wealth and splendour in the palaces of the sovereign and the chief nobles.

TOWNS.—The principal towns in the countries of India beyond the Ganges are as follow :—

<i>Countries.</i>	<i>Towns.</i>
BURMAH.....	Ava, Amarapoora.
SIAM.....	Bang-kok, Ayuthia.
ANAM.....	Hué, Kachao, Saigon.

Ava, the chief city of Burmah, stands on the Irawady; as also does *Amarapoora*, a short distance above the capital. *Bang-kok*, the capital of Siam, is on the river Meinam, near its mouth: it is a busy emporium of maritime traffic, a large portion of the inhabitants living in floating houses, upon rafts moored in the river. Many of the inhabitants are Chinese. *Hué*, the capital of the Empire of Anam, is on the east side of the peninsula, upon the coast of Cochin-China. *Kachao* is the chief place in the province of Tonquin, further to the northward.

Cambodia, once an independent and powerful kingdom, occupies a frontier position between Cochin-China and Siam, and is now chiefly included within the territory of the latter state. The gum known as *gamboge* is derived hence.

The population in the interior of the peninsula consists of the Laos, or Shan tribes, some of whom are nearly independent, while others are subject either to Siam, Cochin-China, or China Proper.

The greater part of the Malay peninsula belongs to Siam, but there are some small Malay States in the southern portion of the peninsula.

The **BRITISH POSSESSIONS** in the Indo-Chinese peninsula consist chiefly of provinces which have been acquired by conquest from the Empire of Burmah. The names of these possessions, with their chief towns, are as follow :—

<i>Provinces.</i>	<i>Towns.</i>
ASSAM.....	Gowhatty.
ARACAN.....	Aracan, Akyab.
PEGU.....	Rangoon, Martaban.
TENASSERIM.....	Moulmein, Tavoy, Mergui.
PENANG.....	Georgetown.
MALACCA.....	Malacca.
SINGAPORE.....	Singapore.

ASSAM is a long valley, watered by the upper and middle portions of the Brahmapootra river.

ARACAN is a narrow strip of country lying along the east side of the Bay of Bengal. Its moist climate and marshy plains enable it to furnish a vast quantity of rice, which is exported from Akyab.

PEGU was formerly the southwardly province of Burmah. It includes the delta of the Irawady, a fertile but unhealthy region. *Rangoon*, on one of the branches of the river, is an important seat of trade.

The provinces known by the general name of TENASSERIM range along the eastern side of the Gulf of Martaban. The town of *Moulmein*, near the mouth of the river Saluen, is their chief port, and is an important seat of trade.

PENANG (or Prince of Wales Island, as it is also called) is a small, but beautiful and fertile island, off the west coast of the Malay peninsula. The town of MALACCA is on the western coast of the peninsula, further to the southward.

SINGAPORE, at the extremity of the Malay peninsula, is the most important commercial station of this region, and is one of the great marts of British commerce in the East. The town of *Singapore* is upon an island of the same name, which is divided from the mainland by a narrow strait. Singapore is little more than one degree to the north of the equator.

Penang, Malacca, and Singapore, are together known as the Straits' Settlements, from their position on the Strait of Malacca.

QUESTIONS ON THE INDO-CHINESE COUNTRIES.

1. In what part of Asia is the Indo-Chinese peninsula situated? By what seas is it bordered upon either side?
2. What three countries are contained within the Indo-Chinese peninsula? Point out their positions on the map.
3. Name the plains that belong to this region. What seas do they adjoin?
4. What rivers flow through the Indo-Chinese countries? Into what seas?
5. Say what you know respecting the climate and natural productions of this region.
6. What race of people constitute the inhabitants of these countries? What is the distinguishing feature of their industry?
7. Under what kind of government are these countries? What form of religion prevails?
8. Name the chief city of Burmah, Siam, and Anam, respectively. Point to the place of each upon the map.
9. Where is Cambodia? What article is derived thence?
10. What portions of the Indo-Chinese peninsula belong to Britain? Name as many as you can of the British provinces in this region.
11. Point out the following upon the map—Assam, Aracan, Pegu, Penang, and Singapore.

12. In what provinces are the towns of Akyab, Rangoon, and Moulmein?
 13. What article of produce is derived extensively from Aracan? What conditions of physical geography favour this?
 14. Point on the map to Penang, Malacca, and Singapore. By what name are these three settlements together known, and why?
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THE CHINESE EMPIRE.

The empire of China is extended over more than a fourth part of Asia, and comprises an area which is considerably greater than that of all Europe. But China itself constitutes a portion only of this widely-extended dominion. Tibet, Mongolia, Manchooria, and Corea, besides China Proper, are included within the Chinese empire.

1.—CHINA.

SITUATION, BOUNDARIES, AND EXTENT.—China is a large country of eastern Asia. It is bounded on the north by Mongolia, on the east by the Pacific Ocean, on the south by the China Sea and the Empire of Anam, on the west by Burmah and Tibet. The area of China is 1,300,000 square miles, which exceeds by twenty-six times the magnitude of England.

SEAS, &c.—The Gulf of Pechelee, the Yellow Sea, the East Sea, the China Sea, and the Gulf of Tonquin, wash different portions of the Chinese coast. All of these belong to the Pacific Ocean.

MOUNTAINS AND PLAINS.—The greater part of China is mountainous. Its western and south-western provinces, especially, are covered with high mountain-chains, the peaks of which rise above the snow-line. The mountain-chain on the western border bears the name of Yung-ling.

The north-eastern part of China is a fertile lowland, known as the Plain of China. The lower courses of its two great rivers are through this plain, which is very fertile, and constitutes the most populous portion of the Chinese empire.

RIVERS.—The two great rivers of China are the Yang-tsze-kiang and the Hwang-ho, both of which flow in an eastwardly direction. The Yang-tsze-kiang is the longest river in the eastern half of the globe, and is navigable by large vessels for many hundreds of miles in the interior; it flows into the East

Sea. The Hwang-ho is not so capable of navigation; its former outlet to the sea was only a short distance north of the mouth of the Yang-tze-kiang, but it has lately altered its course, and is said to flow now into the Gulf of Pechellee.

The two rivers next in importance are the Pei-ho or river of Pekin, and the Choo-kiang, or river of Canton. The Pei-ho flows into the Gulf of Pechellee; the Choo-kiang into the China Sea. Some large lakes adjoin the course of the Yang-tze-kiang.

CLIMATE AND PRODUCTIONS.—The climate of China is generally temperate, but it is one of great extremes at opposite seasons. The summers are very hot, and the winters excessively cold. This is the case all over central and eastern Asia.

Of natural productions, the tea-plant is the most remarkable. It is a shrub of moderate size, which grows abundantly in the south-eastern provinces of the country (Kwang-tung, Fo-kien, and Che-kiang), where it is cultivated with great diligence. The leaves are gathered at particular seasons, and according to the period at which they are picked, and the process of drying which they afterwards undergo, they form either the black or green teas of commerce.

China abounds in useful and valuable productions of the vegetable world. The orange, mulberry, jujube, sugar-cane, and cotton-plant, are native to its soil, and flourish throughout its middle and most favoured belt of country. The mineral produce is also of high value. Good coal abounds. The mountain-provinces of the south-west yield the precious metals, and ores of iron, copper, lead, tin, and mercury are extensively distributed through various parts of the country.

POPULATION AND INDUSTRY.—China is said to contain upwards of three hundred and sixty millions of inhabitants, a number which probably equals a third part of the human race. It is by no means certain that this is the case, but it is not improbable, and the amount—vast as it is—implies a less ratio of population to the square mile than occurs in England. China abounds in large cities, and the banks of its rivers and canals literally swarm with human life. Great numbers of Chinese emigrate annually, and they are settled numerously in every part of the eastern Archipelago.

The industry of China embraces alike agriculture, manufactures, and commerce. The mass of the population derive their subsistence from the soil, which is tilled with extreme

care, and the pursuit of agriculture is held in the highest esteem. Rice is the chief article of food. Of manufactures, silk and cotton are the most important. The silkworm is a native of China, and is reared in vast numbers throughout the middle and southern provinces. The manufacture of earthenware is also of national importance, and the term by which the finer description of pottery is commonly known in our own country indicate the fact of its original derivation from China. A great number of earths and other mineral substances are employed in this manufacture, and a place called Kin-te-ching (in the inland province of Kiang-see, south of the Yang-tsze river) is its central seat. The carving of ivory, the making of caddies, trays, and other lacquered ware, various works in metal, and, more than all, the art of printing from raised blocks, indicate the skill and ingenuity of the Chinese artisan.

The trade of China is immense. Tea is supplied thence in vast quantities, not only to the different countries of Europe and the United States, which maintain a maritime intercourse with the Chinese ports, but also, by overland traffic, to the countries of northern and central Asia. Tea is not less a necessary of life to the Mongol shepherd and the half-savage Kirghiz than to the civilised native of European lands.

Besides tea, the Chinese export silk and nankeen stuffs, porcelain, lacquered wares, ivory, and various ornamental articles. They import the cotton and woollen cloths of Britain, and the opium of British India, together with a great variety of articles from the islands of the East Indian Archipelago—as pepper, betel-nut, sandal-wood, ebony, ivory, mother-of-pearl, with edible birds'-nests and tripang, (or sea-slug,) the two latter being highly valued as articles of food.

Two public works stand in evidence of the industry of the Chinese people—the Great Wall, and the Grand Canal. The former runs for twelve hundred and fifty miles along the northern border-line of China, over hill and valley, and was built in order to protect the country from Tartar invasion—a purpose which, like all similar works, it failed to fulfil. The Grand Canal extends for seven hundred miles through the great plain, and has hitherto formed the main highway for the conveyance of rice and other articles to the capital. But recent changes in the course of the Hwang-ho (which has abandoned its former bed, and made for itself a new channel, into the Gulf of Pechelee) have destroyed portions of the

canal, and rendered it necessary to adopt a seaward route for the commercial intercourse between Peking and the provinces to the southward.

DIVISIONS AND TOWNS.—China is divided into eighteen provinces. It is only the coast-districts that have hitherto been visited (except on rare occasions) by Europeans, and little is known of the interior.

The cities of China are generally of large size—many of them said to have each several hundred thousand inhabitants. The capital of the empire, Peking, is stated to contain two millions of people. Among the most important, besides Peking, are Shang-hae, Nankin, and Han-yang—all three situated within the valley of the Yang-tsze—Hang-chow, Ningpo, Fuh-chow, and Amoy, on the coast to the south of the Yang-tsze—and Canton, above the mouth of the Choo-kiang, on the south coast.

Peking, the capital of the Chinese Empire, is in the north-east part of the country, near the river Pei-ho, and not far from the Great Wall. *Nankin*, which ranks second in importance, is on the south bank of the Yang-tsze. The stream of the Yang-tsze is the great highway of the interior commerce of China, and a numerous population is found upon its banks.

Shang-hae, on the coast, at the southern entrance to the great river, has since 1842 (when it was first opened to European commerce) become yearly more important as a commercial emporium, and is now a great centre of the tea trade.

Canton, long the sole point of intercourse between the Chinese and the people of other lands, and the single emporium of the tea trade, is at the head of an extensive estuary into which the river called Choo-kiang falls. A group of islands lies off the entrance of this river: one of the group (the second in point of size) is Hong-kong, which belongs to Britain. On a tongue of land upon the western side of the estuary is *Macao*, which belongs to the Portuguese.

The large islands of Formosa and Hainan lie off the coast of China, and belong to that country.

GOVERNMENT, &c.—The government of China is a strict despotism, based throughout upon the assumption of parental authority. The emperor is the recognised vicegerent of heaven, and the father of all his subjects; through all the gradations of society the same notion of parental authority is carefully preserved. The mandarins (as the various civil and

military authorities of China are styled by Europeans) constitute nine different orders of rank, each in regular subordination to that immediately above it. The prevailing religion is Buddhism.

The island of HONG-KONG was ceded to Britain in 1842. It is hilly, watered, and tolerably healthy, and its situation, off the entrance of the Canton river, gives it political and commercial importance. Its area is thirty-six square miles. Its population, which now numbers upwards of 80,000, consists principally of Chinese. The chief town is *Victoria*, on the north coast of the island.

2.—TIBET.

TIBET, an inland country, is to the west of China, and is divided from India by the Himalaya Mountains. It consists of a vast plateau, upwards of 15,000 feet above the level of the sea, and consequently cold in respect of climate. Besides the Himalaya Mountains, on its southern border, the tableland of Tibet is crossed by stupendous mountain-chains—the Karakorum and the Kuen-lun—which extend through it in the direction of east and west. Numerous rivers originate in this elevated region, and descend thence to the surrounding plains. The Yarrow, or San-poo, which is believed afterwards to join the Brahmapootra, has its course through Tibet. The lake of Rakas Tal, lying at an elevation of 15,200 feet, gives origin to the Sutlej, and the main stream of the Indus originates in the high mountain-region of Western Tibet.

The industry of Tibet is almost wholly pastoral. Vast herds of sheep, mountain goats, and buffaloes, are reared, and supply the materials for extensive traffic. The fine hair of the Tibetan goat is woven into the shawls of Cashmere.

Though under the recognised sovereignty of China, the native institutions of Tibet appear to be little interfered with. The real sovereign of the country is the Grand Lama, or high priest of the Buddhist religion, of which Tibet is the seat. The town of *Lassa*, which forms his residence, is the capital of the country.

The regions known as LADAKH and LITTLE TIBET are to the

westward of Tibet Proper. They embrace the elevated tract of country which adjoins the north-western declivities of the Himalaya, and are thinly inhabited by a people of pastoral habits.

3.—MONGOLIA.

MONGOLIA comprehends a vast region of central Asia, stretching from Tibet and China to the borders of Siberia, and including the desert tract known as the Gobi or Shamo.* It consists for the most part of a succession of moderately-elevated plains, which have a gradual descent towards the region surrounding the lake of Lop and the course of the river Er-gheu. The great chain of the Thian-shan, or Celestial Mountains, stretches through central Asia in the direction of east and west, and forms a leading division in Chinese geography.

Mongolia is wholly a pastoral region. The bulk of its population are nomades, whose wealth consists in their flocks and herds, and whose habits are those which uniformly belong to such a mode of life. The entire belt of central Asia, from the banks of the Amoor to those of the Volga, is termed by its wandering inhabitants "the Land of Grass," and vast tracts of pasture-ground, alternating at intervals with mountains, rivers, and lakes, constitute its characteristic feature. In such a region, the aspect of social life remains almost unchanged from generation to generation. The Mongol of the present day is a shepherd, and (when occasion requires) a warrior, as his ancestors were in the days of Timour and Genghiz Khan.

The few towns are found upon the frequented routes of commerce. *Cashgar*, *Yarkand*, and *Khoten*, in the western part of the empire, to the southward of the Thian-shan, are within the tract of country known as Chinese Turkestan (or Little Bucharia), and are of considerable size.

4.—MANCHOORIA.

MANCHOORIA is an extensive but little known tract of country lying east of Mongolia, and limited on the northward

* See page 149.

by the course of the river Amoor, which forms the frontier between the Chinese and Russian dominions. Both Manchooria and Mongolia were formerly included under the general appellation of Chinese Tartary. The southern province of Manchooria, which is called Leaotong, is inhabited principally by Chinese.

5.—COREA.

COREA is a peninsula which stretches southward from Manchooria, between the Yellow Sea and the Japan Sea. Its inhabitants are exceedingly jealous of intercourse with strangers, and the interior is unknown to Europeans.

The Loo-choo Islands, a group lying 400 miles to the east of the Chinese mainland, are a dependency of China. Some distance northward of this group is Sulphur Island, which is a volcano, whence sulphurous vapours are continually emitted.

QUESTIONS ON THE CHINESE EMPIRE.

1. Name the countries that are included within the Chinese Empire, and point to their places on the map.
2. How is China bounded? What is its size as compared with that of England?
3. What seas wash the shores of China? To what ocean do they belong?
4. What is the general aspect of China, as to natural features? Which parts of the country are most mountainous? What part forms a lowland plain?
5. Name the two chief rivers of China, and trace out their courses upon the map.
6. What two rivers come next in importance to the above? Into what seas do they flow?
7. By what characteristics is the climate of China distinguished?
8. Among the natural productions of China, which ranks first in importance? State what you know concerning it.
9. Mention some other of the natural productions of China, vegetable and mineral.
10. To what number is the population of China supposed to amount? Is this number, relatively to the area of the two countries, greater or less than the ratio of population in England?
11. Give some particulars respecting the industrial pursuits of the Chinese people.
12. What constitutes the chief item in the foreign trade of China? What other articles do the Chinese export?
13. What articles do the Chinese derive from the East Indian Archipelago?
14. By what two great public works is China distinguished? Which of the two is the more really useful?
15. Name the capital city of China, and point it out upon the map.

16. Mention some others of the principal cities of China. Point out their places upon the map.
17. Upon what river is Nankin? What other places are within the valley of the same stream?
18. Where is Shang-hae? What branch of trade is carried on there? To what city was this trade, until a recent period, restricted?
19. What two large islands lie off the coast of China? Point them out upon the map.
20. What form of government prevails in China? What is the prevailing religion?
21. Where is Hong-kong? What kind of island is it, as to natural features? To what nation does it belong?
22. What kind of country is Tibet, as to its physical features?
23. Of what religion is Tibet the seat? How is the head (or high priest) of this religion styled?
24. Name the chief city of Tibet, and find out its place upon the map.
25. What are the chief physical features of Mongolia? What desert does it include?
26. By what habits of life are the Mongols distinguished?
27. What three towns are within the limits of Chinese Turkestan? Point out their places on the map.
28. Where is Manchooria? What river forms its northerly limit?
29. Where is Corea? By what are its inhabitants distinguished?
30. Where are the Loo-choo Islands? Point to their place on the map.

TURKESTAN.

SITUATION, &c.—TURKESTAN is an extensive region of central Asia, reaching from the western limits of Mongolia to the shores of the Caspian Sea. The more eastwardly portion of this region is within the Chinese frontier, and is distinguished as Chinese Turkestan; its westwardly division—which is the tract of country referred to in this section—constitutes several independent States, each under the rule of a Khan.

Independent Turkestan is bounded on the north by Russia, on the east by the Chinese Empire, on the south by Afghanistan and Persia, on the west by the Caspian Sea. Its area is probably equal to a million of square miles.

NATURAL FEATURES.—The greater part of Turkestan forms a lowland plain, which slopes towards the Sea of Aral. Many parts of this plain are desert, but it includes some watered and fertile districts. These are chiefly found in the south-east, towards the Chinese border, and in the neighbourhood of the mountain-region to which the Hindoo-Koosh belongs.

RIVERS.—Two great rivers belong to Turkestan—the Amoo or Oxus, and the Syr or Jaxartes. Both of these flow into the Sea or Lake of Aral, which has no outlet.

CLIMATE AND PRODUCTIONS.—The climate of this region is one of great extremes. In the open and desert plains which stretch to the south and east of the Aral, the winters are excessively severe. Within the mountain-region (that is, the south-eastern and eastern parts of the country) many of the valleys are well watered, and yield abundant harvests of grain and fruit. But the greater part of the country is desert.

POPULATION AND INDUSTRY.—Most parts of Turkestan are thinly peopled, but the entire region is supposed to have from six to eight millions of inhabitants. They are of mixed origin and appearance: the majority appear to be of Tartar or Mongol race—members of the great family of nations that compose the bulk of the population of central Asia. Some of them consist of nomadic tribes, whose habits are warlike, but the larger proportion occupy fixed places of abode, and cultivate the soil. Silk is an article of extensive produce upon the banks of the Oxus, the mulberry being abundantly reared for the purpose. Large numbers of sheep and goats are reared by the pastoral tribes, and camels are numerous. The commerce of the country is almost entirely a transit trade—the caravans between Russia on the one side, and Persia, India, and China, on the opposite frontiers, passing through this territory. Cotton, corn, wool, and skins, are among the chief productions of Turkestan.

DIVISIONS AND TOWNS.—Turkestan comprehends several independent States, each ruled by a Khan or Emir. The three most important of the number are :—

<i>States.</i>	<i>Chief Towns.</i>
BOKHARA	Bokhara, Samarcand, Balkh.
KHIVA	Khiva.
KOKAUN	Kokaun, Tashkend.

Bokhara is the most important of the above. The city of *Bokhara* is situated within the fertile valley of the Zeraf-shan river. *Samarcand*, which is further to the eastward, on the same stream, is an ancient and celebrated city, now decayed. *Khiva* is on a branch of the Oxus or Amoo river.

GOVERNMENT, &c.—The States of Turkestan are strict despotisms, and the power of the sword is only controlled by the authority of the Koran—the Mohammedan ritual of faith. The population are uniformly followers of the religion of Mohammed.

ASIATIC RUSSIA.

Asiatic Russia comprises two distinct territories—one of them, SIBERIA, of vast size ; the other, TRANSCAUCASIA, of much smaller extent.

1.—TRANSCAUCASIA.

SITUATION, &c.—The name of Transcaucasia* is given to a territory situated to the southward of Mount Caucasus, and occupying the isthmus which intervenes between the Black and Caspian Seas. It is bounded on the north by the chain of Mount Caucasus, on the east by the Caspian Sea, on the south by Persia and Asiatic Turkey, and on the west by the Black Sea. The entire region perhaps comprehends about 80,000 square miles.

MOUNTAINS, &c.—The greater part of Transcaucasia is mountainous. The chain of the Caucasus rises above the snow-line, and its higher portions exceed 10,000 feet above the sea. El-burz, which is the highest point of the chain, reaches upwards of 18,000 feet, which is a greater height than that of Mont Blanc. The only road which crosses the Caucasus attains, at the summit of the pass, an elevation of 8,000 feet.

The country lying further south, towards the Persian border, includes part of the plateau of Armenia. Mount Ararat, upwards of 17,000 feet high, is within its limits, near the border-line of Persia and Turkey.

RIVERS.—The Kour (ancient Cyrus), and its tributary the Aras (ancient Araxes), are the chief rivers of Transcaucasia. They both flow, by the single stream of the Kour, into the Caspian Sea. The large lake of Goukcha, or Sevan, which is within Russian Armenia, is connected with the stream of the Aras.

CLIMATE AND PRODUCTIONS.—The climate of Transcaucasia, though temperate on the average, is yet one of great extremes. In the plains towards the Caspian, the heats of summer are excessive, while the winter is one of prolonged and extreme severity. This is especially the case in the open plains of the Armenian plateau.

The productions of the soil constitute the chief wealth of this territory. There are extensive forests, in which wild animals (among them the boar and the antelope) abound ;

* That is, beyond the Caucasus.

and the watered valleys yield plentiful crops of grain, besides fruits. Both the vine and the mulberry flourish, and the cotton-plant thrives.

POPULATION AND INDUSTRY.—The total population of Transcaucasia is estimated at little more than two and a half millions. They comprise people of various races and creeds, but the majority are Georgians and other people of what is called the Circassian stock. The inhabitants of the Caucasus have been famed, in all ages, for their personal beauty, and they still preserve this reputation. The Georgian and Circassian girls, sold as slaves in the markets of Constantinople, were derived from this region. This traffic has been in great measure checked within recent years, owing to the interference of Russian authority.

There is little of regular industry in Transcaucasia. The mountain tribes have been almost continually engaged in warfare with Russia, since they came under the nominal subjection of that power, at the beginning of the present century. Agriculture is pursued to a limited extent.

DIVISIONS AND TOWNS.—Transcaucasia is divided by the Russians into four governments. The larger portion of the whole region is known to Europeans as Georgia, while other parts of the territory are called Mingrelia, Imeritia, Shirvan, and Russian Armenia.

GEORGIA includes the chief part of the valley of the Kour, and contains the town of *Tiflis*, the capital of the whole territory. Tiflis is on the river Kour, and at the southward termination of the great road which crosses the Caucasus.

The only other town of any considerable importance is *Erivan*, situated within Russian Armenia, not far from the foot of Mount Ararat. Erivan stands on a small tributary of the river Aras.

2.—SIBERIA.

SITUATION, &c.—SIBERIA includes all the northern belt of the Asiatic continent, comprising the vast plain which slopes from the Altai Mountains to the Arctic Ocean.

Siberia is bounded on the north by the Arctic Ocean, on the east by the Pacific, on the south by the Chinese Empire and Turkestan, and on the west by Russia in Europe. Its area is greater than that of all Europe, probably equalling four millions of square miles.

SEAS, GULFS, AND ISLANDS.—The following belong to the coasts of Siberia :—

Gulf of Obi.
Gulf of Yenesei.
Behring Strait.

Sea of Kamchatka.
Sea of Okotsk, or Kurile Sea.

Behring Strait is the channel that divides Asia from the continent of America. It is about sixty miles across in its narrowest part.

The Liakhov (or New Siberian) Islands are off the north coast of Siberia. The peninsula of Kamchatka and the chain of the Kurile islands are on its eastern side.

NATURAL FEATURES.—Siberia is a vast lowland-plain. The Altai Mountains form its southern border, and impart diversity of surface to the country which adjoins their base. Great level plains, or *steppes*, stretch out thence to the northward, and become more barren and desolate as they approach the shores of the Polar Sea. Towards the latter they form a level waste of ice and snow during the larger portion of the year, converted into a series of swamps and marshy lakes during the brief summer of these high latitudes.

The easterly division of Siberia is less generally level than its westerly portion. A high chain of mountains, several among which are active volcanoes, extends through the peninsula of Kamchatka.

RIVERS AND LAKES.—The three great rivers of northern Asia—Obi, Yenesei, and Lena—belong to Siberia. Each of these streams has a course of between two and three thousand miles before its waters reach the ocean, but the high latitudes through which they flow prevent their being much navigated, excepting in their upper portions. Many of their tributaries, however, which run in a direction transverse to that of the main streams (or east and west), are extensively used as channels of intercourse.

The rivers Irtish, Tobol, and Ishim, are the chief tributaries of the Obi. The chief tributary of the Yenesei is the river Angara, which flows out of Lake Baikal, the largest fresh-water lake of Asia.

CLIMATE AND PRODUCTIONS.—The climate of Siberia is cold. It is only in the south that a moderate temperature is experienced. The extreme north, towards the shores of the Arctic Sea, exceeds any other region on the globe in the intense severity of its winter, which is prolonged through nearly ten months of the year.

Siberia, however, has natural productions of great value. These are of two kinds, belonging to distinct divisions of the natural world—metals and furs. The former occur in the neighbourhood of the Ural and the Altai Mountains, in both of which localities gold is worked to a considerable extent. Mines of silver and lead are also worked in the Altai region, to the east of Lake Baikal. Iron, copper, and many other metallic and mineral productions, as well as valuable masses of porphyry and other marbles, are also supplied by Siberia. Malachite (which is a carbonate of copper) is extensively derived thence.

The other source of wealth is found in the variety and abundance of animals furnished by nature with warm coats of fur, to enable them to withstand the cold of a Siberian climate. Among these are the sable, otter, minx, ermine, fox, and many others; but their numbers have materially diminished under the pursuit of the Russian hunters.

POPULATION AND INDUSTRY.—Siberia has not more than two millions of inhabitants. By far the larger portion of it is too cold and dreary to be fitted for permanent habitation, but there are fertile and cultivated tracts in the south, towards the mountain-region of the Altai and the shores of Lake Baikal. The native tribes of Siberia are chiefly hunters and fishers: the Russians use this country as a place of exile, and the unhappy prisoners transported thither are condemned to work in the mines.

An extensive commerce is maintained between Russia and China, through the medium of Siberia. Tea, and other productions of China, are thus brought, by a long land journey (with the frequent aid of river navigation), into the north of Europe. The Russian and Chinese traders meet at Kiakhta, to the south of Lake Baikal, on the line of frontier between the two empires.

The native tribes of Siberia are for the most part idolaters. Those dwelling in the eastern parts of the country exhibit a low and barbarous condition of life, and are almost independent of Russian control. The people of Kamchatka are of short stature: they have few settled habitations, and are remarkable for the extent to which they use the dog for the purpose of draught, as we do the horse.

DIVISIONS AND TOWNS.—Siberia is divided into two great governments—eastern and western—the principal towns in which are as follow :—

<i>Governments.</i>	<i>Towns.</i>
WESTERN SIBERIA	Tobolsk, Ekaterinberg, Omsk.
EASTERN SIBERIA	Irkutsk, Kiakhta, Yakutsk, Petropavlovsk.

Irkutsk, the capital of eastern Siberia, is the largest and most important city in the whole region. It stands on the river Angara, a short distance below its issue from Lake Baikal. The town of *Petropavlovsk** is on the east coast of Kamchatka. *Tobolsk*, the largest city of western Siberia, is at the junction of the river Tobol with the Irtysh, the chief tributary of the Obi. *Omsk* is situated at the point where the river Om joins the Irtysh.

The Russian territory in this part of the world has been considerably extended within recent years. In the east, it now includes the whole country lying northward of the great river Amour; and in the west, the extensive tract occupied by the Kirghiz hordes. The Kirghiz are a wandering people, of pastoral habits, divided into three great hordes, who range over the steppes that stretch to the north of the sea of Aral.

QUESTIONS ON TURKESTAN AND ASIATIC RUSSIA.

1. To what part of Asia is the name of Turkestan given? Point it out upon the map.
2. How is Independent Turkestan bounded?
3. What constitutes the chief natural feature of Turkestan?
4. Name the two principal rivers of this region, and trace their courses on the map.
5. By what is the climate of Turkestan distinguished? Which parts of the country are most productive?
6. Say what you know concerning the people of Turkestan, as to their industry, and habits of life.
7. Turkestan is divided into several independent states: name the three principal of these. By what title is the ruler of each distinguished?
8. Point on the map to the places of the following cities—Bokhara and Samarcand. On what river is Khiva?
9. Asiatic Russia embraces two distinct territories: give their names, and point to each upon the map.
10. What kind of country is Transcaucasia, as to natural features? What famous mountain is within its limits?
11. Name the two principal rivers of this region, and trace out their courses on the map.
12. What lake lies within Transcaucasia? With what river is it connected?
13. What do you know concerning the climate and productions of Transcaucasia?
14. To what race of people do the majority of the people of Transcaucasia

* That is, harbour of St Peter and St Paul

- belong? By what circumstance have they been, in all ages, distinguished?
15. What portion of this territory is known by the name of Georgia? What is its chief city, and on what river does this stand?
 16. Where is Erivan? Near what mountain?
 17. How is Siberia bounded? What range of mountains divides it from Russia in Europe? What from the Chinese Empire?
 18. What two gulfs are on the north coasts of Siberia? What two seas on its eastern side?
 19. What strait adjoins the eastern extremity of Siberia? What two continents does this strait divide?
 20. What is the great characteristic of Siberia in respect of natural features? What kind of country does it form towards its northern limits?
 21. Where is Kamchatka? What kind of country is it as to natural features? What cape forms its southern extremity?
 22. Name the three great rivers of Siberia, and trace their courses on the map.
 23. What kind of climate has Siberia?
 24. What natural productions of value belong to Siberia? Say what you know concerning these.
 25. For what purpose is Siberia used by the Russian government? What are the chief pursuits of the native tribes?
 26. At what place, on the Siberian and Chinese frontier-line, is commercial intercourse maintained between the Russians and the Chinese? What article do the Russian traders obtain from China?
 27. Into what two governments is Siberia divided? What is the chief town of each?
 28. On what rivers are Tobolsk, Omsk, and Irkutsk?
 29. Where is Petropavlovski? Point out its place upon the map.
 30. Where is the region of the Kirghiz hordes?

EAST INDIAN ARCHIPELAGO.

SITUATION, &c.—The East Indian Archipelago is an insular region of vast extent, to the south-eastward of the Asiatic continent. It is within the Torrid Zone, and is crossed by the line of the equator.

Of the islands included within this region, the largest is Borneo; the second in size is Sumatra; the third in this respect is Celebes, and the fourth is Java. Next in order of magnitude are the islands of the Philippine and Molucca groups.

SEAS, CHANNELS, AND STRAITS.—The Pacific Ocean, the China Sea, and the Indian Ocean, enclose the region of the East Indian archipelago. The various islands which it embraces are divided by numberless lesser seas and channels, among which are the following:—

Java Sea.
Celebes Sea.
Banda Sea.

Flores Sea.
Mindoro (or Sooloo) Sea.
Macassar Strait.

Strait of Malacca.
Straits of Sunda.

The Straits of Malacca and Sunda form the two great channels of entrance to this region from the westward. The Strait of Malacca divides the island of Sumatra and the Malay peninsula: the Strait of Sunda intervenes between the islands of Sumatra and Java. Nearly all ships that proceed from the ports of Europe to the coasts of China, or to any of the islands of the archipelago, pass through one or other of these channels. English vessels—whether direct from England, or from the ports of India—nearly always use the Strait of Malacca, along the shores of which are situated the British settlements of Penang, Malacca, and Singapore.* Dutch vessels, on the other hand, adopt the Strait of Sunda, which adjoins the possessions of Holland in this part of the globe.

CLIMATE AND PRODUCTIONS.—The climate of the East Indian archipelago is hot, but the generally intense heat of the torrid zone is here moderated by the influence of the surrounding seas. The temperature is hence not so high as upon many parts of the Asiatic mainland. The air is mostly healthy, excepting in low and marshy districts. The rains fall copiously at particular seasons, which are dependent upon the change of the monsoon.

The natural productions of this region are rich in the extreme. Gold and precious stones, in the mineral department of nature, with rich fruits and spices, in the vegetable world, distinguish these fertile and beautiful islands of the eastern seas. Both gold and diamonds are among the productions of Borneo. But the grains, aromatic plants, and valuable woods, with many curious vegetable productions of the different islands, are of more real value to man. The tree which yields gutta-percha is a native of Borneo and some other of the islands. The nutmeg and the clove belong to the smaller islands of the Molucca group (or the Spice Islands, as they were, from this circumstance, formerly called). Sago is the produce of the islands in the more easterly division of the archipelago.

POPULATION AND INDUSTRY.—The entire population of the East Indian archipelago is considerably more than twenty millions. The island of Java alone has above eleven millions of inhabitants, and the Philippine Islands contain upwards of five millions.

The native races, throughout the archipelago, are in a state of semi-barbarism. The Malays are the ruling people, except-

* See page 196.

ing in those islands where European supremacy is established ; in most of the islands there are various black races, some of whom exhibit a very low condition of savage life. The Malays are skilful navigators and active traders. They also carry on piracy upon a scale of great extent. Their long war-canoes are the terror of the archipelago. A vast number of Chinese are found settled in various parts of this region.

The East Indian archipelago is the theatre of an active commerce. The English and Dutch, among European nations, and the Chinese among the people of the eastern world, are most extensively engaged in this trade. The people of the United States are also active agents in it. Spices, gutta-percha, coffee, indigo, sugar, cigars, and tortoise-shell, are among the productions exported hence to Europe and America. Edible birds'-nests, and the substance called tripang, are among the articles in demand among the Chinese. The former of these are the nests of a species of swallow, the material composing which is cemented by a viscous kind of substance—the produce of the bird itself : the latter (called also *biche de mer*, or sea-slug) is a gelatinous mass of living matter, belonging to the order of radiated animals, and found adhering to the rocks in certain parts of the Indian archipelago. Both are articles of luxury to the Chinese epicure.

The Dutch, the Spaniards, and the English, exercise sovereignty over a large portion of the East Indian archipelago. The Dutch are the masters of Java, of some parts of Sumatra, Borneo, and Celebes, and of the smaller islands of the Molucca group. The Spaniards possess a considerable portion of the Philippine Islands. The English claim only the little island of Labuan, off the north-west coast of Borneo ; but the settlement of Singapore, at the entrance of the archipelago by the Strait of Malacca, is a great emporium of the commerce of this insular region.

BORNEO is 270,000 square miles in area, or more than three times the size of Great Britain. Its interior has never been explored by Europeans, but the districts lying near the coast are fertile and productive in the extreme. High mountains, navigable rivers, and dense forests, are among its natural features.

The western and southern shores of Borneo, with part of the east side of the island, are subject to the Dutch, who

export the produce of the gold and diamond mines worked in the neighbourhood of the western coasts. The province of *Sarawak*, on the north coast, is an independent principality, under the rule of a British subject. The larger portion of the island, however, is divided among various native states, one of which includes the town and territory of *Borneo* (or *Bruni*), upon the north side of the island. Off the mouth of a navigable river which leads to the town of Borneo is the small island of *Labuan*, which belongs to Britain. Labuan contains good coal, which is worked by the settlers on the island.

SUMATRA has an area of nearly 150,000 square miles, which is three times the size of England. A chain of high mountains runs along its western coast. Many parts of the coast are under the rule of the Dutch, whose chief stations are *Padang* and *Bencoolen*, both upon the western side of the island. There are also numerous native states, one of the principal of which is *Acheen*, near its northern extremity.

JAVA is about 45,000 square miles in area—that is, not much less than the size of England. A chain of lofty volcanoes runs through the whole length of the island, from west to east. Java belongs to the Dutch, and its chief city, *Batavia*, is the capital of the Dutch possessions in the East Indies. The chain of smaller islands that stretch to the eastward of Java are also chiefly Dutch. The Portuguese, however, have a small settlement upon the north coast of Timor, the most eastwardly of the number.

CELEBES is chiefly divided among natives states, but the Dutch possess the south-western part of the island, which includes the settlement of Macassar.

The MOLUCCA ISLANDS, to the eastward of Celebes, are principally Dutch. The most important among them is the small island of Amboyna, which is the seat of extensive commerce.

The PHILIPPINE ISLANDS form the most northerly portion of the archipelago, and constitute one of the most important possessions of the Spanish crown. The largest island of the group is called Luzon, which is nearly equal to England and Wales in point of size. Mindanao is next in magnitude.

All the islands of the Philippine group are mountainous ; they also contain numerous rivers, and are throughout well watered, fertile, and productive. Tobacco, sugar, and rice, are largely grown there. The chief city is *Manilla*, situated on the western coast of Luzon. There are numerous English and American merchants settled at Manilla, which is the seat of extensive trade.

JAPAN.

SITUATION, &c.—JAPAN is an insular empire, situated to the eastward of the Asiatic continent, and within the Pacific Ocean. It consists of an extensive group of islands, the largest of which is called Nippon. Kiusiu and Sikokf, to the south of Nippon, and Jesso, to the north of that island, are the other principal members of the Japan group. The whole area of Japan is 160,000 square miles—nearly twice the size of Great Britain.

NATURAL FEATURES.—Little is known of the interior of Japan, but a chain of lofty mountains is believed to traverse the entire group of islands. Several of these mountains are active volcanoes. Fertile plains and valleys, watered by numerous rivers, extend between the mountains and the sea.

CLIMATE AND PRODUCTIONS.—The climate of Japan is temperate and healthy—perhaps not differing materially from that of Britain, excepting in its greater extremes of heat and cold at particular seasons. Among its productions are included, in the mineral kingdom of nature, gold, silver, iron, copper, and tin ; and, in the vegetable world, trees that yield valuable gums and resins, with the tea-plant and the mulberry. The last is extensively used as the food of the silk-worm.

POPULATION AND INDUSTRY.—The population of Japan is estimated by some writers at twenty-five millions ; by others, at double that amount. Nothing is really known on this subject, but the country bears the appearance of populousness, and the cities are of large size.

The Japanese are an ingenious and a civilised people—though their civilisation, like that of all oriental races, differs in many respects from European civilisation. Their industry is displayed in the careful culture of the land, the good roads which connect the various towns and villages, their skilful

manufacture of silk, cotton, and japanned wares, and the commercial intercourse which they maintain with China. Rice, cotton, tobacco, the tea-plant, and the mulberry, are among the articles of most extensive culture. The art of covering metals with varnish (*japanning*) derives its popular appellation from this country. Their porcelain displays much skill, and possesses a beauty of its own peculiar kind.

It is only within the last few years that foreigners have been permitted to visit the ports of Japan. Prior to 1854, commercial intercourse was restricted to the Dutch, among European nations, and to their neighbours the Chinese. The Dutch were allowed to send a couple of ships annually to the port of Nangasaki, on the west coast of Kiusiu. But treaties of commerce now exist between Japan and the various governments of the United States, Britain, France, and other countries.

The government of Japan is a strict despotism, under military forms. The laws are said to be severe, and the punishments sanguinary. The people appear to be mostly followers of the Buddhist religion.

TOWNS.—The capital city of Japan is *Jedo*, situated on the south-east coast of Nippon, at the head of a fine bay. Jedo is said to have two millions of inhabitants. *Kanagawa*, nearer the sea, is its port. *Miako*, on the same island, further to the west, is a large city, the residence of the dairi, or chief ecclesiastical authority of the empire. *Hakodadi*, on the south coast of the island of Jesso, is a considerable commercial town.

The island of Segalien, to the northward of Jesso, is divided between Japanese and Russian rule. Three of the Kurile Islands belong to Japan: the rest of the chain to Russia.

QUESTIONS ON THE EAST INDIAN ARCHIPELAGO AND JAPAN.

1. Where is the East Indian archipelago situated? Which of its islands is largest? Which second and third, in point of size?
2. Name some of the seas and channels that divide the various islands of this region.
3. What two straits form the principal channels of entrance to the archipelago, from the side of the Indian Ocean? Point them out upon the map.
4. What kind of climate has the East Indian archipelago?
5. Mention some of the natural productions of this part of the globe.
6. What race (among the native inhabitants) are the ruling people in the archipelago? What are their habits and occupation?

7. In what articles does the trade of the archipelago chiefly consist? What nations are the most active agents in this trade?
8. What portions of the East Indian archipelago belong respectively to the Dutch, the Spaniards, and the English?
9. Point to the island of Borneo on the map. How large is this island, as compared with Great Britain? What is known with respect to its natural features?
10. In what part of Borneo is the principality of Sarawak? Off what part of the coast is Labuan Island?
11. Point to Sumatra. In which part of this island are the principal Dutch settlements? Mention their names.
12. Point to Java, and say what you know concerning its natural features. Name the chief city of this island, and point it out upon the map.
13. Where is the island of Celebes? Where the group of the Moluccas? Which, among the smaller islands of the Molucca group, is most important as a seat of commerce?
14. Where are the Philippine Islands? Name the largest island of the group, and point out its place upon the map. What is its chief town called?
15. In what part of Asia are the islands of Japan? What proportion does their magnitude bear, as a whole, to that of Great Britain?
16. What is known respecting the natural features of Japan? What is the name of the largest island of the group?
17. Say what you know concerning the climate and productions of Japan.
18. Mention some particulars respecting the industry of the Japanese people. For what branches of manufacture are they distinguished?
19. Under what kind of government is Japan? What is the prevailing religion?
20. What city is the capital of Japan? Point to its place upon the map.
21. Upon what islands are the towns of Miako, Nangasaki, and Hakodadi? Point them out on the map.

AFRICA.

AFRICA is the south-western portion of the Old World, and is the only one of its three continents that stretches to the southward of the equator. By much the larger portion of its surface, however, falls within the northern hemisphere.

BOUNDARIES AND EXTENT.—Africa is bounded on the north by the Mediterranean Sea; on the west by the Atlantic Ocean; on the east by the Red Sea and the Indian Ocean; on the south by the Southern Ocean, a name which is given to the southwardly belt of water in which the Atlantic and Indian Oceans mingle.

Regarding Africa as a whole, it forms a vast peninsula, connected with the Asiatic continent by the Isthmus of Suez.

In point of size, Africa is more than three times larger than Europe, but nearly one-third smaller than the Asiatic continent. Its area is equal to about 12,000,000 square miles.

SEAS, GULFS, AND CHANNELS.—One of the chief things to be noticed about Africa is its solid, unbroken shape, and the general regularity of its coast-line. The sea nowhere penetrates any considerable distance towards the interior, and the vast bulk of the continent is quite unaffected by its influence. Africa has therefore few gulfs or inlets of any extent.

The Mediterranean Sea on the north, and the Red Sea on the east, wash the shores of Africa. The Mediterranean is common to all three of the continents of the Old World. But it is more European than either Asiatic or African. By

far the larger portion of its coast-line is European, and while its northwardly coasts exhibit every variety of contour; embracing numerous peninsulas and intervening channels, its southward (or African) line of coast is comparatively unbroken.

The Gulf of Sidra and the Gulf of Kabes are the two chief inlets on the Mediterranean portion of the African coasts. The Gulf of Sidra was called by the ancients *Syrtis major*,* and was dreaded by them on account of its shallows and shifting sands. The Gulf of Kabes, further west, was the *Syrtis minor* of antiquity.

On the west side of the African continent is the Gulf of Guinea, which is a broad arm of the Atlantic.

On the east side of Africa are the Red Sea, the Gulf of Aden, and the Mozambique Channel.

CAPIES.—The following are the most important :—

On the North Coast.		On the West Coast.	
Cape Blanco.	Cape Ceuta.	Cape Bojador.	Cape Palmas.
Cape Bon.	Cape Sparte.	Cape Blanco.	Cape Lopez.
		Cape Verde.	Cape Frio.
On the South Coast.		On the East Coast.	
Cape of Good Hope.	Cape Agulhas.	Cape Guardafui.	Cape Delgado.

Cape Bon makes near approach to the island of Sicily. Cape Blanco, on the Mediterranean coast, is the most northerly point of the African continent. There is another Cape Blanco, a famous headland, on the western side of Africa.

The most westerly point of Africa is Cape Verde. The most easterly is Cape Guardafui. The most southwardly is Cape Agulhas.

ISLANDS.—On the side of the Atlantic are—Madeira, the Canary Islands, the Cape Verde Islands; the four islands in the Gulf of Guinea (Fernando Po, Princes Island, St Thomas, and Annabon); Ascension, St Helena, and the Tristan d'Acunha group.

On the side of the Indian Ocean—Madagascar, Bourbon, Mauritius, the Comoro Islands, the Seychelle Islands, the Amirante group, and Socotra.

In the Red Sea, there are numerous small islets which adjoin the African coast, and there are also a few in the Mediterranean. But these are small and unimportant. Madagas-

* Latin, *syrtis*, a quicksand.

car is second only in size to the island of Borneo, and is therefore the second-largest island in the world.

MOUNTAINS AND PLAINS.—The most extensive known mountain-system of Africa is that distinguished by the name of Atlas. The chains of Mount Atlas (as the whole of the mountain-region is called) stretch through a large part of Northern Africa, parallel to the Mediterranean coasts and the nearest portion of the Atlantic shores. The westerly portion of the Atlas (that which passes through Morocco) is the most elevated, and the higher summits there exceed 11,000 feet. The eastern portions of the system—in Algeria, Tunis, and Tripoli—are much less elevated, rarely exceeding 3000 feet.

A second mountain-system occupies Abyssinia, on the eastern side of the African continent, and probably extends into the unexplored regions lying south of that country. The highlands of Abyssinia are several thousand feet above the sea-level, and the summits which rise above their base reach in some places an absolute elevation of 15,000 feet.

A third system of mountains belongs to the western coasts of tropical Africa, and stretches in a direction parallel to the Gulf of Guinea. This is known by the general name of Kong—a word which is said to signify “mountains.” The height of the Kong Mountains is not known.

A fourth mountain-system is that which belongs to the extreme south of Africa. A chain called the Nieuveld (and, in its eastern part, the Sneeu-berg, or Snowy Mountains) stretches through the Cape Colony, in the direction of east and west. Its highest summits exceed 10,000 feet.

The interior of Africa appears to consist of vast plains, alternating in some places with tracts of high ground, but nowhere exhibiting extended mountain-chains such as those which stretch through the Asiatic continent. To the northward of the equator, the plains of interior Africa embrace the region of the Desert, and the fertile lowland watered by the Niger and the rivers belonging to the basin of Lake Chad. In the southern half of Africa, the interior—so far as known—consists of watered plains, lying at a considerable elevation above the sea, but bordered by tracts of higher ground upon either side. The rivers of the interior find their way through these bordering high grounds, and descend thence to the eastern and western coasts.

DESERTS.—The great natural feature of Africa—surpassing all others in magnitude and importance—is its Desert, or Sahara, which stretches across the entire breadth of the continent, and is by much the largest desert in the world, as well as the most perfectly barren of such regions.

The region known as the Sahara * extends in the direction of east and west through three thousand miles, from the shores of the Atlantic Ocean to the valley of the Nile. In the opposite direction, it is limited by the slopes of Mount Atlas on the north, and the basin of the Niger and Lake Chad to the southward, having a breadth which averages a thousand miles. This immense region is not uniformly barren, nor does its surface exhibit perfect uniformity of aspect.

In general, the African desert forms a plateau of moderate elevation (averaging from 1000 to 1500 feet above the sea). In some places, chains of hills cross this plateau, and rise to several hundred feet above its level. The surface of the wilderness exhibits, however, for the most part, a sandy or gravelly waste, furrowed at frequent intervals by the beds of water-courses, which are dry during ten months of the year. The absence of running streams is the most marked characteristic of the desert. Springs occur at distant intervals; and, wherever they are found, an *oasis* † of verdure is created.

The most sterile portion of the Sahara is its westerly division—that is, the part intermediate between Fezzan and the shores of the Atlantic. Extensive tracts are there covered with dry and heated sand, raised into hillocks which shift their place under the influence of the wind. The oases are there at longer distances apart than is the case in its more eastwardly portion.

There are some extensive deserts in Southern Africa, towards the extremity of the continent in that direction. They consist of arid and gravelly plains, locally known as *karroos*. The Great Karroo is within the southward division of the Cape Colony. The desert of Kalahari is to the north of the Orange river.

* That is, the Desert, which is what the word Sahara (*Arabic*) means. In pronouncing this word, the accent should be laid upon the first syllable, the second *a* being short, thus, Sáhāra.

† The word *oasis* is probably derived from a Coptic term signifying “a resting-place.” The perennial spring of water naturally becomes the resting-place of the traveller across the wilderness. The oasis of the desert—possessing verdure in the midst of surrounding sterility—has been often likened to an island in the midst of the ocean.

RIVERS.—The longest river of Africa is the Nile, which flows into the Mediterranean. The most distant source of the Nile has not yet been visited by Europeans, but the river probably rises to the south of the equator, and has a course of at least 3000 miles before reaching the sea.

The Nile is formed by the junction (near the town of Khartoom, in Nubia) of two great streams, distinguished as the White Nile and the Blue Nile. The former, which is the more westerly of the two, is the longer arm of the river. The Blue Nile, however, which rises in the mountains of Abyssinia, has the greater volume of water above the point of junction. Below the junction of its two great branches, the Nile has only one tributary—the Atbara, or Tecazze. It flows onward to the Mediterranean, through a further course of 1400 miles, without being joined by a single stream.

The other chief rivers of Africa are—

Flowing into the Atlantic Ocean.

Senegal.....	through Senegambia.	Congo.....	through Loango and Congo.
Gambia.....	do.	Coanza.....	Angola.
Rio Grande.....	do.	Orange, or }	Southern Africa.
Niger, or Quorra.....	Central Africa.	Gariep }	

Flowing into the Indian Ocean.

Zambesi.....through interior of Southern Africa.

LAKES.—The northern half of Africa contains the following:—

Lake Chad.....	situated in Soudan
Lake Dembea.....	Abyssinia.
Lake Keroun.....	Egypt.

The largest is Lake Chad, which covers several thousand square miles during seasons of flood, but is greatly contracted at other times, and is little more than a vast swamp. It receives the waters of an extensive system of rivers, among which the Shary and the Yeou are the most considerable. Lake Chad has no outlet: its water is fresh.

Several extensive lakes are known to exist in the interior of Southern Africa, and two of the number—Lake Ujiji and Lake Ukerewe—have been recently visited, for the first time, by Europeans.* Lake Maravi (or N'Yassi), and Lake Ngami,

* These two lakes—the former of them 330 miles in length—are within the space comprehended between the equator and the parallel of 8° 30' S. lat., and at a distance of about 500 miles from the eastern coasts of the continent.

are also large bodies of water, in the southern interior of this continent.

EXAMINATION QUESTIONS.

1. How is Africa bounded, and what is its position with reference to the other divisions of the Old World?
 2. What proportion does Africa bear, in point of size, to the European and Asiatic continents?
 3. By what is Africa distinguished, as a whole, in respect of its shape, or external contour?
 4. What two gulfs occur on the Mediterranean coasts of Africa? Give their ancient as well as their modern names.
 5. What gulf is on the west side of the African continent? What arms of the sea on its eastern side? Point them out on the map.
 6. Name some of the principal capes of Africa, pointing to their places on the map.
 7. What capes form respectively the most northern and southern points of the African continent? What two its most eastern and western points?
 8. Point on the map to the following—Cape of Good Hope, Cape Palmas, Cape Bojador, Cape Sparte, and Cape Delgado.
 9. Name the principal islands of Africa on the side of the Atlantic, pointing them out upon the map.
 10. Name the islands on the side of the Indian Ocean. Which is largest of the number?
 11. Africa has four distinct mountain-systems. Name them, and point to their places upon the map.
 12. What constitutes the greatest and most important among the natural features of the African continent? Give some account of it, as to extent and general character of surface.
 13. What is meant by the term *oasis*? To what is the fertility of the oasis due?
 14. Which is longest among the rivers of Africa? Trace its course upon the map, and name the countries through which it flows.
 15. Name the other principal rivers of the African continent. Which of the number flows into the Indian Ocean?
 16. What lakes belong to the northern half of Africa, and which is largest of the number?
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CLIMATE AND NATURAL PRODUCTIONS.—Africa is the hottest division of the globe. This is readily accounted for: more than three-fourths of its extent fall within the Torrid Zone, and these portions of the continent exhibit a broad and unbroken mass of land, upon which the rays of a vertical sun act with intense power. The vast expanse of the Desert (or Sahara), in particular, reflects an excessive amount of heat from its arid and waterless surface. The whole of this region forms a great natural furnace, the heated atmosphere generated in which is carried by the winds over distant lands and seas, only

gradually losing its heat under the influence of the larger bodies of water.

The climate of tropical Africa is for the most part dry, but a vast quantity of rain falls at particular periods of the year. The dry and rainy seasons succeed one another with perfect regularity, and they are the only seasons by which the climate of Africa, within the tropics, is distinguished. In the Desert, rain very seldom occurs—only at intervals of several years' duration, and intense aridity is its prevailing characteristic. But the plains of Central Africa, to the south of the Desert, and also the low districts of the eastern and western coasts, have regular and abundant rains, of annual recurrence.

The climate of tropical Africa is unhealthy to Europeans, from its intense heat, and still more from the prevalence—within the coast regions—of noxious exhalations (the result of a burning sun acting upon a dense mass of vegetation, such as occurs at the mouths of the rivers and creeks), which generate fevers. Where any considerable elevation above the sea can be reached, these unhealthy influences disappear.

The extreme portions of the African continent, both in the direction of north and south, fall within the temperate zones. The plains and valleys of the Atlas region have a climate which resembles, in all essential regards, that experienced on the opposite shores of the Mediterranean. The Cape Colony, at the other extremity of the continent, is somewhat cooler, and is less abundantly supplied with rain.

METALS AND MINERALS.—Little is known concerning the mineralogy of Africa; and, whatever its capabilities in this regard, the amount of mineral produce derived thence in the present day is comparatively small. The Atlas region has been found to include a rich variety of ores—among them iron, copper, lead, and other metals. Towards the opposite extremity of the continent, within the Cape colony and the adjacent tracts of country, iron and other useful ores abound, and the region through which the river Zambesi flows is stated to contain coal, as well as various useful metals.

Gold-dust, derived from the beds of numerous rivers within tropical Africa, has been in all ages an article of export from this portion of the globe. Both the eastern and western coasts furnish gold, and a part of Guinea is especially distinguished as "the Gold Coast." The quantity of gold derived thence, however, in the present day, is exceedingly trifling.

VEGETATION.—A vast number of the plants native to the African continent differ in all respects from those that belong to the other divisions of the globe. It is to the southward of the Great Desert that the distinguishing characteristics of African botany are observed. The vegetation which is native to northern Africa resembles that of the opposite shores of the Mediterranean. The rich fruits of southern Europe all grow to perfection in the watered valleys of the Atlas. The fig, almond, orange, lemon, vine, mulberry, and peach, thrive there, and the mountain-sides are clothed with the luxuriant evergreen foliage of southern lands.

The plains that adjoin the southern base of the Atlas are the region of the date-palm. To this succeeds the Desert, with its scanty covering of thorny shrubs and grasses—diversified by the occasional growth of palms, which distinguish every oasis in the wilderness. The Desert is a vast natural barrier to the passage of the various forms of life—vegetable and animal alike—that belong to the regions by which it is limited upon either side, and the trees and plants of Central Africa are entirely distinct from those that belong to the shores of the Mediterranean.

The forests of tropical Africa include trees of vast size, most of them of species unknown in Europe. Among them are many which furnish timber of valuable quality, distinguished by the closeness of its texture and the beauty of its grain. Some of the native plants yield articles of food such as are unknown in other lands. Among these is the *shea*, or butter-tree—so called from a kind of butter which is derived from the kernel of its nut. The baobab, or monkey-bread, is one of the most valuable boons conferred by nature upon the negro inhabitants of the regions watered by the Senegal and the Gambia. The oil-palm is another of the valuable productions of the western coasts. The palm-oil of commerce, now an article of extensive consumption in our own country, is expressed from its fruit. The yam, ground-nut, and other esculent roots, are likewise among the native productions of the African soil within the tropics. The cotton-plant grows wild, as also do the sugar-cane and the indigo-plant, though they have not been generally turned to any account by the native population. The highlands lying to the south of Abyssinia are the native region of the coffee-tree.

The extreme south of the African continent, again, constitutes a third region of vegetable life, distinct from those of

the north and the centre. The country to the south of the Orange river is the native seat of such plants as the aloe and the heath tribe. A vast variety of plants with thick fleshy leaves, and thin wiry roots—capable of thriving in a comparatively arid soil, such as belongs to the plains of that region—abound in the neighbourhood of the Cape of Good Hope. Some of the choicest ornaments of our greenhouses have been originally derived thence.

ZOOLOGY.—The regions which are marked out as the seats of distinct forms of vegetable life in the African continent are characterised by cognate differences in the animal world, though the line of division is perhaps less definite. The influence of the vast desert is, however, strikingly noticeable. The lion of northern Africa is of a different species from that native to the southerly division of the continent. The striped hyena, which is common to northern Africa with the neighbouring countries of western Asia, is not found to the south of the Desert, where the spotted hyena takes its place. The giraffe, or camelopard—an animal peculiar to the African division of the globe—is native to the whole interior of southern Africa, but is not found either to the north of the Desert or within its limits. The zebra, and other animals of the same family, again, are peculiar to southern Africa; as also are the elands, and several other large members of the antelope kind.

Africa abounds more than any other of the continents in variety of animal life, and in the vast number of its mammalia. That is to say, it contains a vast number of native species (many of them peculiar to its soil), and exhibits also an immense numerical development of many among these species. This is especially the case in the interior plains of southern Africa, which literally swarm with abundance of animal life. The various antelopes, and numerous members of the ox tribe, supply abundant examples of this. Vast herds of these animals range over the plains to the northward of the Orange river.

Among quadrupeds which are peculiar to Africa may be mentioned the hippopotamus and the rhinoceros. The former, which frequents the marshy banks of rivers and inland lakes, is found from the upper part of the Nile valley southward to the Orange river, and westward to the shores of the Atlantic Ocean: the rhinoceros is native to the plains of central and southern Africa. The African elephant belongs to the same

wide-spread region, limited on the north by the impassable barrier of the Desert. This latter tract would be nearly as impassable to man as it is to the lower animals, were it not for the camel, which fills in the northern half of the African continent the same place that it does in the arid wildernesses of western Asia.

The quadrumanous order of animals (monkeys, baboons, &c.) is numerous developed in Africa, and its various members are found through nearly the whole extent of the continent, from the Atlas Mountains to the forests of the Cape Colony. Only in the Desert, again, are they absent. The forests of the western coasts, within the tropics, give shelter to the species of apes which make nearest approach to the human form. The chimpanzee of Senegambia is surpassed in this respect by the *gorilla* of the Gaboon river, within the woods adjoining which it has been seen, for the first time, within recent years.*

Among birds, the ostrich is peculiar to Africa. The guinea-fowl is the only member of the gallinaceous tribe native to this continent. The sun-birds of the western coast, and the honey-suckers of the Cape of Good Hope, are distinguished by their smallness of size as well as the brilliancy of their plumage.

The crocodile of the Nile-valley is one of the characteristic members of African zoology, in the reptile division of the animal kingdom. It belongs to other rivers within tropical Africa, as well as the Nile. Serpents, lizards, and other reptiles, are sufficiently numerous in the marshy regions of the coast, but are less common in Africa than in some other divisions of the globe.

POPULATION.—Africa is the native home of the Negro family of man, to which the great bulk of its inhabitants belong. But in this, as in all other regards, the Desert constitutes a region of division. The inhabitants of northern Africa are Berbers, Moors, and Arabs—people of swarthy complexion, but perfectly distinct from the Negro type. The wandering inhabitants of the desert belong also to the Arab stock. It is not until the southern limit of the Sahara is passed that Negro Africa begins. This is the region known in African geography as Soudan—*i. e.*, the land of the blacks, or Negro-land.

The dark skin, thick lips, and woolly hair of the Negro, are among the distinguishing features of that race. But there

* The river Gaboon enters the eastern extremity of the Gulf of Guinea, a short distance to the north of the equator (in lat. $0^{\circ} 30' N.$).

are numerous points of difference between the various Negro nations, as there are between the various nations of the European and Asiatic continents. The inhabitants of the Nile valley, in the present day, are chiefly of Arab race, excepting in its upper part, where they are mixed with native African nations.

Negro Africa includes the greater part of Africa within the tropics. The extreme south of this continent, like the extreme north, is peopled by other varieties of the human family. The native races of southern Africa are Hottentots and Caffres—the former chiefly within the basin of the Orange river, the latter on the eastern borders of the Cape Colony and the adjacent shores of the Indian Ocean.

EXAMINATION QUESTIONS.

1. By what is the climate of Africa, on the whole, distinguished? How is this to be accounted for?
2. By what conditions are the rains that occur in this division of the globe distinguished?
3. What portions of Africa enjoy a temperate climate, and why? Point to these regions upon the map.
4. Say what you know concerning the mineral productions of the African continent.
5. Mention some of the fruits that flourish in Northern Africa, within the Atlas region.
6. What part of the African continent is especially distinguished as the region of the date-palm?
7. Mention some of the distinguishing features of African vegetation within the region lying south of the Great Desert.
8. The extreme south of the African continent forms a third region of vegetable life: what class of plants form a chief part of its distinguishing features?
9. Among carnivorous animals, mention some that are found in Africa.
10. To what parts of Africa is the giraffe native? To what the zebra and other animals of that family?
11. Which portion of the African continent is especially distinguished by its abundance of animal life? What classes of animals are most numerous found there?
12. Among African quadrupeds are the hippopotamus, the rhinoceros, and the elephant: to what portions of Africa are they native?
13. Are animals of the quadrumanous order numerous in Africa? Which amongst them is remarkable for its near resemblance to the human figure, and where is it found?
14. What particulars do you know concerning the birds that are native to the African continent?
15. Of what branch of the human family is Africa the special home? By what peculiarities of appearance is this variety of mankind distinguished?
16. What races of people constitute the inhabitants of Northern Africa?
17. Point on the map to those parts of the African continent which are the native seat of the Negro race. By what name is this region known in African geography?
18. What native races belong to the extreme south of the African continent?

COUNTRIES OF AFRICA.

THE ATLAS REGION, OR NORTHERN AFRICA.

SITUATION, BOUNDARIES, &c.—Northern Africa embraces four distinct countries, known as MOROCCO, ALGERIA, TUNIS, and TRIPOLI. Morocco is the most westerly of the four, Tripoli the most easterly. They form together a continuous region, which stretches along the shores of the Mediterranean Sea and the nearest portion of the Atlantic.

Morocco is bounded on the west by the Atlantic Ocean, and has the Mediterranean Sea on a part of its northern frontier. On the south it is limited by the Desert.

Algeria lies to the east of Morocco. The Mediterranean Sea bounds it to the northward, and the Desert to the south.

Tunis is east of Algeria. On the north and east it has the Mediterranean : on the south, the Desert.

Tripoli is to the east of Tunis. It consists of a long and narrow strip of country, between the Mediterranean and the Desert, the sands of which approach closely to the sea throughout, and in some places advance into its waters.

NATURAL FEATURES, CLIMATE, &c.—Throughout Northern Africa, the great features of nature are nearly uniform. The chains of Mount Atlas stretch through the entire length of these countries, but only attain any considerable height within Morocco. The plains between the Atlas and the sea, and the valleys that are included within the mountain-region, are the most fertile portions of the territory. The hill-sides, towards the Mediterranean and the Atlantic, are luxuriantly wooded. Their southern slopes pass gradually into the arid region of the Desert.

This portion of the African continent has no perennial rivers of any magnitude. There are numberless winter-torrents, but few of them preserve a continuous flow of water. The lakes which occur are chiefly to the south of the Atlas, and are little more than salt-marshes. The climate is warm, and generally healthy, but the whole region is exposed, on its southern borders, to the hot winds of the adjacent Sahara. The rains are copious, but confined to particular seasons, and the soil, wherever sufficient moisture is obtained, is luxuriantly fertile.

POPULATION AND INDUSTRY.—The whole population of Northern Africa perhaps amounts to fourteen millions. Morocco alone contains more than half the number. The least populous portion of the entire region is Tripoli, in which the cultivable land is limited to a mere narrow strip between the Desert and the sea.

The people of Northern Africa are *Kabyles* or *Berbers*, who dwell in the mountains, and in the scattered villages throughout the Atlas region; *Moors*, who are the inhabitants of the cities; and *Arabs*, who live in the more open parts of the interior, principally within their own encampments. In Algeria, which belongs to France, there are also a great number of European settlers, chiefly French. The Berbers or Kabyles are supposed to be descended from the original inhabitants of this region. The Moors are a mixed race, sprung from intercourse between the natives and the numerous colonists (Arabs included) who have at various periods settled within these lands.

The industry of Northern Africa is not considerable. The preparation of Morocco leather (from the skin of the native goat) is a pursuit in which the inhabitants excel. The larger portion of the whole region is pastoral—sheep and goats being very numerously reared. The grain called *dhourrah* (or millet) is extensively grown; wheat, barley, and maize, to a less extent. Within Algeria, since its possession by France, the cultivation of cotton, tobacco, the cochineal-tree, and indigo, has been introduced.

The native productions of Northern Africa include wool, gum, bees'-wax, dates, olive-oil, and goat-skins. These are exported, and the manufactures of Europe introduced in their place.

DIVISIONS AND TOWNS.—The chief towns are as follow:—

<i>Countries.</i>	<i>Towns.</i>
MOROCCO.....	Morocco, Fes, Mequinez, Mogadore, Tangier.
ALGERIA.....	Algiers, Constantine, Oran, Bona.
TUNIS.....	Tunis, Cairwan.
TRIPOLI.....	Tripoli.

Morocco, Fes, and Mequinez, are inland cities, situated within the plain at the western foot of the Atlas. *Mogadore* is the port of Morocco. *Tangier* is at the entrance of the Strait of Gibraltar, immediately beside Cape Spartel.

Algiers, the chief city of Algeria, is on the Mediterranean coast, as also are *Oran* and *Bona*. *Constantine* is in the in-

terior, on the banks of a rapid torrent called the Roumel. Both *Tunis* and *Tripoli* are maritime cities. *Cairwan* is a short distance inland.

Northern Africa, like the countries of western Asia, exhibits almost everywhere the traces of decay from a past condition of greatness and prosperity. The chief part of the countries enumerated above were comprehended within the empire of ancient Rome, and the frequent remains of Roman roads, temples, theatres, and aqueducts—their ruins now overgrown with the luxuriant vegetation of a semi-tropical climate—bear testimony to the greatness of the Roman power. In the immediate neighbourhood of Tunis are the remains of *Carthage*—once the rival of Rome. Further to the eastward, within the territory of Tripoli, are the ruins of the Greek cities which formed the ancient Pentapolis—chief among them *Cyrene*, or Grennah, as it is now called.

The large territory of FEZZAN, to the southward of Tripoli, is tributary to that state. Fezzan comprehends an area of considerable extent, which, though devoid of perennial streams, yet constitutes a kind of oasis, and is fertile by comparison with the desert regions between which it is enclosed on either side. The chief town of Fezzan is called *Mourzook*. The principal commercial intercourse between central Africa and the shores of the Mediterranean passes through Fezzan, by way of Mourzook, which is on the direct line of communication between the city of Tripoli and the borders of Lake Chad.

GOVERNMENT, &c.—All the native governments of Northern Africa are despotic. Morocco forms an empire, under the rule of a Sultan: the sovereign of Tunis bears the title of Bey: the ruler of Tripoli is styled the Pasha. Both Tripoli and Tunis are nominally subject to Turkey. Algeria has formed, since 1830, a province of France.

The native population of Northern Africa is almost exclusively Mohammedan, in point of religion. Jews are numerous in the towns. The manners and usages of the inhabitants are in many respects barbarous, or indicate, at the best, but a very low grade of civilisation.

QUESTIONS ON NORTHERN AFRICA.

1. What four countries are embraced within Northern Africa? Which is most westerly of their number? Which most to the eastward?
2. What constitute the chief natural features of this region?
3. What kind of climate has Northern Africa?
4. What races of people are found among the inhabitants of this region?
5. Say what you know concerning the pursuits of industry in this part of Africa. What articles of native produce does it furnish?
6. Name some of the cities in this part of Africa, and point them out upon the map.
7. In which of the countries of Northern Africa are Fes, Constantine, Tagger, Bona, and Cairwan?
8. What place constitutes the chief port of Morocco? Point to it on the map.
9. What remains of antiquity does Northern Africa exhibit, and to what period of antiquity do they chiefly belong?
10. Where are the remains of Carthage? Where those of Cyrene? Find out the localities on the map.
11. How is the sovereign of Morocco styled? How the rulers of Tunis and Tripoli, respectively? To what nation does Algeria belong?
12. What form of religion prevails among the population of Northern Africa?

THE NILE REGION.

1.—EGYPT.

SITUATION AND BOUNDARIES.—Egypt is the lower portion of the Nile-valley, extending from the coast of the Mediterranean up to the First Cataract, a distance of between five and six hundred miles. It is bounded by the Mediterranean Sea on the north, by Nubia on the south; on the east by the Red Sea, and on the west by the Desert, across which there is no defined line of frontier.

NATURAL FEATURES, CLIMATE, &c.—Egypt has two great natural features—the river Nile, and the Desert. Cultivation is limited to the lands that immediately adjoin the former, and over which its inundations reach.

In its course through Egypt, excepting for the last 120 miles, the Nile flows in a narrow valley, which is strictly limited by high chains of rocks upon either side. These rocks, or rather hills (which reach in some places a thousand feet above the valley) divide the cultivable land from the Desert, which begins immediately beyond. This Desert reaches in one direction to the shore of the Red Sea, and on the other side forms part of the great wilderness of Northern Africa.

A hundred and twenty miles above the sea, the Nile divides

into two branches, called respectively (from the names of the towns situated near their outlets) the Rosetta and the Damietta branches. The former is the more westerly, the latter the easterly arm, of the river. The two enclose between them an extensive *delta*.*

The Delta—or Lower Egypt, as that portion of the country is called—consists of a broad and watered plain, crossed by numerous channels, natural or artificial. Above the Delta, the habitable part of Egypt is limited to the immediate valley of the river, which seldom reaches more than seven or eight miles' across, between the bordering chains of hills upon either side. Egypt, therefore—in so far as its habitable portion is concerned—is a much less extensive country than it appears to be upon the map.

The Nile overflows its banks annually, the river beginning to rise above its ordinary level in the month of June, and continuing to rise daily until the latter end of September, at which time nearly the whole valley is laid under water. The waters afterwards gradually retire within their proper bed, leaving behind them a fertilising deposit, to which the abundant harvests of Egypt are due. During the time of "high Nile" (as the season of inundation is called), only the rising grounds upon which the villages are mostly built are seen above the flood, and Egypt presents the appearance of a vast inland sea—many of the inhabitants living in rafts upon the water. This periodical rise of the Nile is caused by the abundant rains in Abyssinia and the highland regions to the southward.

Egypt has a warm and dry climate. Excepting in the Delta, rain seldom occurs—in Upper Egypt only at long intervals, which are sometimes of two or three years' duration. The intense dryness of the air has been the means of preserving from decay the monuments of ancient art with which Egypt abounds.

POPULATION AND INDUSTRY.—Egypt has upwards of two

* A delta is the space enclosed between the various branches into which a river divides above its outlet. Such tracts of country necessarily assume a triangular shape, resembling the fourth letter of the Greek alphabet, Δ, (Delta), whence the term is derived. It was to the region enclosed between the different arms of the Nile that the term was originally applied by the Greeks. It has become extended, in modern geography, to all similar tracts of land. The Danube, the Rhine, the Volga, the Ganges, Indus, Amazon, and a great number of other rivers, form deltas. The extent of these tracts of land is continually increased by the deposition of sediment where the river meets the sea.

million inhabitants. The vast majority of these are of Arab race, the offspring of the Arab settlers in Egypt within the period that immediately succeeded the Mohammedan conquest in the tenth century. They constitute the agricultural population, or *fellahs*, as they are called. The descendants of the ancient Egyptian (or Coptic) race are few in number. There are Turks (the ruling people), with Armenians, Syrians, Jews, and Franks, or Europeans, in the towns.

The industry of the Egyptian population is almost exclusively devoted to the culture of the soil. The inundations of the Nile fertilise the land, and the limits reached by the waters of the river mark the extent of cultivation. Abundant harvests of wheat, dhourrah, and other grains, are reared, and cotton is grown to a considerable extent in the plains of the Delta. Flax, sugar, hemp, tobacco, coffee, saffron, mulberries, and dates, all enter into the list of Egyptian agricultural produce. The cotton and surplus corn of Egypt are exported, chiefly to England, and the manufactured productions of western Europe imported in return.

DIVISIONS AND TOWNS.—The Nile-valley is divided, within Egypt, into Lower, Middle, and Upper. Lower Egypt consists of the Delta, and the adjoining plains on either hand : Middle Egypt is that portion of the country which reaches from the apex of the Delta to the town of Manfaloot (lat. 27° 17') : Upper Egypt extends thence to the First Cataract and the Nubian frontier. The chief towns are :—

<i>Divisions.</i>	<i>Towns.</i>
LOWER EGYPT.....	Alexandria, Rosetta, Damietta, Suez.
MIDDLE EGYPT.....	Cairo.
UPPER EGYPT.....	Siout, Kenneh, Assouan.

The only two really large cities of modern Egypt are Cairo and Alexandria. The former is the capital of the country, and the latter its chief seaport.

Cairo stands on the right or eastern bank of the Nile, a short distance above the head of the Delta. It is a great centre of traffic between the East and the West, and its importance in this respect has become largely extended within recent years by the opening of the overland route to India. This line of communication passes from Alexandria, on the Mediterranean coast, to Cairo, and thence to Suez, at the head of the Red Sea. Cairo communicates by railway with each of those places, and is a central point of intercourse for the

numerous passengers, to and fro, between Eastern and Western lands. Cairo owes its origin to the Arab conquerors of Egypt, by whom it was founded in the year 970.

Alexandria is a city of much older date. Its name commemorates that of Alexander the Great, by whom it was founded 332 B.C. It at once became a flourishing emporium of commercial intercourse, and grew rapidly into a splendid city, destined to rank only second in place among the cities of the Roman world. Within recent years the commercial greatness of Alexandria has in some degree revived, under the circumstances above referred to. Aboukir Bay, the scene of Nelson's great victory over the French fleet in 1798 (commonly known as the battle of the Nile), is a short distance east of Alexandria.

Suez, at the head of the Red Sea, belongs to Egypt, though Arabian rather than Egyptian by geographical position. Its only importance is due to its being the port of embarkation for the navigation of the Red Sea, on the line of route to India.

The objects regarded with most interest in Egypt are the works of a past age. The numerous antiquities that are found within the Nile-valley supply an unfailing field of study to the admirer of ancient art. Amongst these monuments of bygone greatness are pyramids, tombs, temples, palaces, colossal statues, obelisks, sphinxes, and many other works.

The Pyramids and the ruins of Thebes are the two more special localities which possess the kind of interest here referred to. *The Pyramids* are within a few miles' distance of Cairo, on the western bank of the river, and the well-known figure of the sphinx—of colossal magnitude—is in their neighbourhood. *The ruins of Thebes* are in a higher part of the Nile-valley, within Upper Egypt, and are spread over a vast space upon either side of the river. *Assouan* (ancient Syene), the frontier town of Egypt, is 150 miles above the ruins of Thebes. The valley of the Nile becomes here contracted to a mere ravine, and a ledge of rock which crosses the bed of the river immediately above Assouan forms what is called the First Cataract, which, like all the so-called cataracts of the Nile, is really a mere rapid.*

* Six cataracts are enumerated in ascending the Nile:—the first (that above referred to) on the frontier of Egypt and Nubia; the others occur in succession in the Nubian portion of the river's course.

The desert to the westward of the Nile contains several *oases*, which are regarded as forming part of Egypt. The largest of these (distinguished as the Great Oasis) is immediately west of the ruins of Thebes. The others are known as the Little Oasis, the Western Oasis, and the Oasis of Sywah. The last is the most northwardly of the number, and lies at a further distance than the others from the Nile. It contains a celebrated fountain, the supposed "Fountain of the Sun," and the locality of the ancient temple of Jupiter Ammon.

GOVERNMENT, &c.—Egypt forms a province of the Turkish empire, and is governed by a pasha, whose office is hereditary in the family of the late Mohammed Ali. The inhabitants are almost uniformly followers of the Mohammedan religion, except in the case of the Copts, who form a Christian Church.

2.—NUBIA.

SITUATION AND BOUNDARIES.—Nubia begins immediately above Egypt. It is bounded on the north by Egypt, on the east by the Red Sea, on the south by Abyssinia, and on the west by the Desert.

NATURAL FEATURES, CLIMATE, &c.—The great features of Nubia, like those of Egypt, are the Nile-valley and the Desert. In Upper Nubia, the two branches of the Nile—the Blue and White Nile (*Bahr el-Azrek* and *Bahr el-Abiad*)—unite their waters nearly at the point where the town of Khartoom is situated. The united stream is joined, some distance below, by the river Atbara, or Tecazze, which comes from the highlands of Abyssinia, to the south-eastward.

The lands watered by the Blue Nile and the Atbara exhibit a diversified surface, with alternate forests and savannahs. Below the junction of the Atbara—that is, in Middle and Lower Nubia—cultivation is limited to the immediate banks of the Nile. The valley of the Nile becomes there a mere ravine, bordered on either hand by chains of rocks, as in Egypt, and of much narrower limits than in the latter country. In some places, where openings occur in the bordering mountains, sands of the adjoining Desert come close up to the river's

The climate of Nubia is more tropical than that of Egypt, and the vegetation bears greater resemblance to that of the torrid zone, within which, indeed, nearly the entire country is situated. Groups of the acacia, the mimosa, and the date-palm, mark the course of the Nile, and the sugar-cane grows wild in the neighbourhood of its banks. The senna-plant is a production of Nubia. Vast forests (among which the ebony-tree and other hard woods are found) occur in the south-eastern division of the country.

POPULATION AND INDUSTRY.—Nubia is very thinly populated, the entire number of its inhabitants being probably below the population of a second-rate English town. By far the larger part of the country is an arid wilderness, and even the watered districts are tenanted principally by the wild beasts of the forest. The scattered villages which occur at intervals along the banks of the Nile mark the abodes of an agricultural population, such as that of Nubia exclusively is. The dhourrah grown in their fields, with the fruit of the date-palm, and a small quantity of tobacco, are almost the sole articles of Nubian produce. The only commerce which the country possesses is a transit trade. The caravans which convey the produce of central Africa to the bazaars of Cairo pass through Nubia, and the traffic in slaves constitutes the most important (as well as the most shameful) item in this branch of industry.

TOWNS.—Upper Nubia contains the town of *Khartoom*, which is the largest place in Nubia, and the seat of government for the whole country, as well as for the adjoining regions of Soudan. *Khartoom* stands on the Blue Nile, a short distance above the junction of the White River. *Sennaar*, also in Upper Nubia, is on the Blue Nile.

New Dongola, on the left bank of the Nile, lower down its course, is one of the most thriving of Nubian towns. Still lower down (a short distance below the Second Cataract) is *Ebsambool*, which is noteworthy for its magnificent rock-cut temple, of ancient date. The only seaport of Nubia is *Souakin*, a small place on the Red Sea.

GOVERNMENT, &c.—Nubia is subject to the Pasha of Egypt, who rules it by means of a governor, resident at *Khartoom*. The authority of the Egyptian pasha, exercised by strict military rule, also extends over Kordofan, a country lying to the west of Upper Nubia, and within the limits of Soudan.

3.—ABYSSINIA.

SITUATION, BOUNDARIES, &c.—Abyssinia is to the south-east of Nubia. It is limited on the eastward by the Red Sea, but has no definite inland frontier. In the present day, indeed, Abyssinia comprehends several distinct States, the limits of which fluctuate with the power of their respective rulers.

NATURAL FEATURES, CLIMATE, &c.—Abyssinia is for the most part a highland region. It includes a succession of lofty table-lands, crossed by mountain-chains, and intersected by deep ravines. Its mountains, some of which reach 15,000 feet above the sea, and are covered with unmelting snows, are among the loftiest on the African continent.

Abyssinia includes the large lake of Dembea (or Tzana), and the sources of the Blue Nile. The latter are found in the Mountains of Geesh, at an elevation of 8700 feet above the sea. The upper course of the Tecazze, or Atbara, is also within this region. The Hawash, another considerable river, flows to the eastward, and is lost in a salt-marsh.

The climate of Abyssinia is intensely hot in the lower grounds, but is temperate and healthy upon the upland plains of the interior. The mineral resources of the country are said to be considerable, but they are little employed.

POPULATION, &c.—Abyssinia is said to contain five millions of inhabitants, among whom are people of several different races, most of them in a condition little above that of savage life. The ruling people (at least in some parts of the country) are the Galla—a race of savage warriors who came originally from the southward, and have overrun many of the finest provinces. The habits of the Abyssinians are coarse and barbarous, and many of their usages distinguished by great cruelty, accompanied with a disregard of human life. They eat raw flesh at their banquets, and leave the dead bodies of criminals exposed in the streets, to be torn in pieces by wild beasts.

DIVISIONS, GOVERNMENT, &c.—The former kingdom of Abyssinia has become broken up into several distinct states, the three principal of which are the kingdoms of Tigre, Amhara, and Shoa, the last-named of which is the most important. In each of these the government is a military despotism. The Christian religion is nominally recognised by great part of the population, but the Galla are pagans.

The chief towns of Abyssinia are as follow :—

<i>Divisions.</i>	<i>Towns.</i>
TIGRE.....	Adowa, Antalo.
AMHARA.....	Gondar.
SHOA.....	Ankobar.

Gondar, the former capital of Abyssinia, is situated to the northward of Lake Dembea. It is surpassed in importance in the present day by *Ankobar*, which lies in the south-eastern division of the country, towards the basin of the Hawash river. *Massowah*, the chief seaport of Abyssinia, is on a small island which adjoins the western shore of the Red Sea.

QUESTIONS ON THE NILE COUNTRIES.

1. What three countries are comprehended within the region watered by the Nile? Point them out upon the map.
2. How is Egypt bounded, and what constitute its two great natural features?
3. Which part of Egypt is known as the Delta? What is meant by the term *delta*, in a geographical sense?
4. By what is the Nile, in its course through Egypt, distinguished?
5. What kind of climate has Egypt?
6. To what race do the majority of the people of Egypt belong? What are their chief pursuits?
7. In what way is the rise of the Nile connected with the industrial pursuits of the Egyptian population?
8. What articles of produce does Egypt furnish to other lands?
9. How is Egypt divided? Point out these divisions on the map.
10. Which are the two largest among the cities of Egypt? Point them out upon the map.
11. To what circumstance is the revived commercial importance of Egypt in the present day mainly due?
12. By whom was the city of Alexandria founded? In what year?
13. What locality of historic note is in the vicinity of Alexandria?
14. Where are Rosetta, Damietta, Suez, Siout, and Assouan? Point them out upon the map.
15. What objects of interest, the works of a former age, does Egypt contain? Name the two localities which possess the most special interest of such a kind, and point out their places on the map.
16. What oases are included within the limits of Egypt? For what is the most westerly of these distinguished?
17. Under what government is Egypt?
18. How is Nubia bounded? What are its chief natural features?
19. What kind of climate has Nubia? Name some of its vegetable productions.
20. Say what you know concerning the inhabitants of Nubia.
21. What towns does Nubia contain? Which of them is the capital? Point to its place upon the map.
22. How is Abyssinia situated with regard to Nubia? By what is it bounded to the eastward?

23. What kind of a country is Abyssinia as to natural features?
 24. Say what you know concerning the people of Abyssinia, as to their general habits and social condition.
 25. Into what three states is Abyssinia divided? Name the chief town in each.

SOUDAN, OR NEGRO-LAND.

1.—CENTRAL AFRICA.

BOUNDARIES AND EXTENT.—Negro Africa embraces three leading divisions—the Central Plains of the interior, to the south of the Desert; the Western Coasts, within the tropics; and the Eastern Coasts, from the equator southward to the neighbourhood of the tropic of Capricorn.

The plain of interior Africa, to the northward of the equator, is bounded on the north by the Sahara; on the south by the Kong Mountains, and (further east) by the unknown regions in the heart of the continent; on the east it adjoins the countries watered by the upper course of the Nile; on the west, those in which the rivers Senegal and Gambia have their origin. The region thus marked out includes not much less than 3000 miles in the direction of east and west, and nearly 1000 miles in that of north and south.

NATURAL FEATURES, CLIMATE, &c.—Central Africa is a fertile, watered, and moderately-elevated plain. It includes the basin of Lake Chad, and the middle and upper portions of the great river Niger.

Lake Chad receives the drainage of an extensive tract of country, the limits of which to the east and south are unknown. Of the rivers which discharge into it, the chief are the Shary, from the south, and the Yeou, on its western side. The lake itself is shallow, and becomes much contracted in size during the dry season of the year. It contains numerous islands.

The river Niger (or Quorra, as it is called by the natives) rises near the western extremity of the Kong Mountains, and has a course of 2300 miles before it reaches the sea. About 300 miles above its mouth, the Niger is joined by the large river Chadda, or Benue, which waters an extensive region of the interior. Below the junction, it passes through the highlands of the Kong mountain-system, and enters the low plain of the coast.

The climate of Central Africa is thoroughly tropical, and portions of this region are probably among the hottest on the globe. But it does not appear to be unhealthy, and is at any rate free from the pestilential influences of the coast. The rains and the season of drought succeed one another with undeviating regularity, the rainy season coinciding with the position of the sun to the north of the equator.

POPULATION, DIVISIONS, &c.—The inhabitants of Central Africa are not exclusively of Negro race. A large proportion of them are of mixed descent, partly of Moorish or Arab blood. These latter are known as Fellatahs; they occupy a position which is politically and socially in advance of the pure Negro races, and have carried with them into the heart of the African continent the rites of the Mohammedan worship and the precepts of the Koran. The Negroes themselves, when not converted to Mohammedanism, are uniformly heathen, followers of the system known as *fetichism*—that is, the adoration of particular objects invested by them with a sacred character, and known as fetishes. The Fellatah population is most numerous in the neighbourhood of Lake Chad, and to the eastward of the Niger; the pure Negro race, to the west of that river.

The native populations of Central Africa occupy a low place in the scale of social advancement. Still, they are not barbarians—at least not in the worst sense of the term. They have adopted settled habits of life, cultivate their fields, weave cotton cloth with some skill, and dye it of bright colours. Many of their towns are of considerable size, and the courts of their native monarchs display various attempts at a rude kind of splendour and dignity.

The great obstacle to social advancement on the part of the Negro race has been the slave-trade. The numerous petty kingdoms into which Negro Africa is divided engage in frequent warfare with one another, for the express purpose of making prisoners to be sold to the slave-merchant. Slave-hunting expeditions are fitted out by the more powerful sovereigns against their weaker neighbours, the villages of the latter burned, the children and the aged slaughtered, in order that the able-bodied may be marched in gangs across the desert, or down to the coast, to be sold into slavery. This has always been the bane of the Negro population of Africa and the substitution of a more legitimate commerce is hence

looked forward to as the best means of improving their condition.

The commercial productions of Negro Africa are chiefly gold-dust, ivory, and ostrich-feathers—besides slaves, which have hitherto constituted the most important item. A great deal of trade is carried on between Central Africa and the countries on the Mediterranean coast, by means of caravans which cross the desert. The merchants engaged in this traffic are principally Moors. Articles of European manufacture are introduced by this channel into the heart of the African continent.

The numerous petty divisions into which this part of Africa is parcelled out are fluctuating in extent, and they exercise no influence beyond their own immediate limits. One of the most important localities in Central Africa is the town of *Timbuctoo*, which stands in the plain on the north side of the Niger, a few miles distant from that river. *Timbuctoo* is a town of some size, a centre of considerable caravan traffic, and was formerly, for a time, the capital of an extensive empire. But it consists only of mud-built houses, seldom more than one storey high, and is surrounded by a mud wall, now fallen into decay. *Sego*, on the Niger, is a town of some size. *Kano*, and *Kashna* (or *Katsena*), further to the east—in the tract of country lying between the Niger and Lake Chad—are also of some size, and the former is the seat of considerable commerce.

The countries to the eastward of Lake Chad are scarcely known, excepting by name, to Europeans. The most easterly of them is Darfour, which has occasionally been visited.

2.—THE WESTERN COASTS.

EXTENT, NATURAL FEATURES, CLIMATE, &c.—The western coasts of Africa, within the tropics, are a distinct natural region, extending through a range of between three and four thousand miles along the Atlantic sea-board, from the borders of the Great Desert, in a northerly direction, to the latitude of Cape Frio, south of the equator. This extended range of coast exhibits a succession of low plains, backed by high grounds at some distance inland. In some places, as at Sierra

Leone,* the high grounds advance to the coast, and meet the waters of the Atlantic.

All the great rivers that are found on the western side of the African continent belong to this region, with the exception of the Orange. The chief of them are the Senegal, Gambia, Rio Grande, and Niger, all to the north of the equator; the Congo and Coanza, south of the line. But a vast number of smaller streams, with numerous creeks and salt-water estuaries, occur throughout the entire range of coast, and help to occasion alike the redundant vegetation and unhealthy climate of Western Africa. The intense heat of a tropical sun, acting on the mass of vegetable matter, occasions the malaria and deadly fevers which are so commonly fatal to Europeans in this part of the world.

POPULATION, &c.—The native inhabitants of Western Africa are throughout of Negro race. A few Europeans are settled amongst them, at various points. The Negro population is divided, as in the interior of Soudan, into numerous petty kingdoms, at frequent war with one another, and the slave-trade (though of limited prevalence now, compared to its former condition,) is the great bar to progress in the arts of industry, and to social improvement. Yet the Negro possesses undoubted capacities for improvement; and the light-hearted gaiety of manner, which is one of his most striking attributes, is accompanied by depth of feeling, tenderness, and strength of will.

The commercial productions of Western Africa include—besides the characteristic gold-dust, ivory, and ostrich-feathers—palm-oil, bees'-wax, and various gums. It is from the regions of the Senegal and Gambia, and the line of the Guinea coast, that these latter are chiefly obtained, and the traffic in them (at the hands of European traders, chiefly English and French) has become largely extended within recent years.

DIVISIONS.—Western Africa is divided, to the north of the equator, into SENEGAMBIA and GUINEA: to the south of that line, into the regions known as LOANGO, CONGO, ANGOLA, and BENGUELA.

SENEGAMBIA (as the name implies) is the region watered by the rivers Senegal and Gambia, and may be said to extend as far as the promontory of Cape Mount, at which the coast of Guinea begins. Particular portions of the shores of GUINEA were formerly known as the Grain Coast, the Ivory Coast,

* That is, Lion's Hill.

the Gold Coast, and the Slave Coast, but only the third of these terms is employed in the present day.

Three among the native States in this part of Africa are superior to the others in power and importance: these are, the kingdoms of Ashantee, Dahomey, and Yarriba—the two former bordering on the Gulf of Guinea, the last-mentioned a short distance inland. The chief town of Ashantee is *Coomassie*; that of Dahomey is called *Abomey*. The chief place in Yarriba is *Abbeokouta*, a large town, and a great centre of missionary enterprise. *Badagry* and *Lagos*, both near the delta of the Niger, and *Bonny*, on one of the eastern branches of that river, are the chief trading-ports on this line of coast.

The name of LIBERIA is given to a settlement of free negroes (consisting of individuals formerly slaves in the United States), on the coast to the westward of Cape Palmas, and in the immediate neighbourhood of a promontory called Cape Mesurado. This settlement has existed since the year 1820, and is a flourishing community, the inhabitants of which pursue agriculture, and export the produce of their fields. The government of Liberia is republican in form. The chief town is called *Monrovia*. There is a similar but smaller settlement at Cape Palmas.

Great Britain, France, Holland, and Portugal, possess settlements upon the western coasts of the African continent.

The BRITISH possessions in this region are three in number—the settlements on the Gambia, Sierra Leone, and Cape Coast Castle.

1. The British possessions on the river Gambia consist of St Mary's Island and the town of Bathurst, at the mouth of the river; Fort James, on an island situated thirty miles above the mouth; and Macarthy Island, 250 miles up the river. The total population of these stations is between four and five thousand.

2. Sierra Leone is a peninsula situated about midway between the Gambia river and Cape Palmas. It was originally established (in 1787) as a place of refuge for liberated negroes, who form the chief part of its population. The capital of the settlement is *Freetown*, on the estuary of the river Rokelle.

3. Cape Coast Castle is the principal of the British settlements on the Gold Coast. It lies a short distance west of the meridian of Greenwich, and consists of a strong fortress,

with a native town immediately adjacent. A few other forts on the same line of coast (both to the eastward and westward of Cape Coast Castle) also belong to Britain.

The FRENCH settlements in Western Africa are Fort St Louis and other places situated near the mouth of the river Senegal, and the island of Goree, in the immediate neighbourhood of Cape Verde.

The DUTCH possessions comprehend a few stations on the Gold Coast, the principal of them being the fortress of El-Mina, in the vicinity of Cape Coast Castle.

The PORTUGUESE possess, to the north of the equator, only a few insignificant stations on the coast of Senegambia, in the neighbourhood of the Rio Grande, and forming a dependency of the Cape Verde Islands. To the south of the equator, the Portuguese influence is much more considerable, and they claim the sovereignty over an extensive line of coast. The two principal of the Portuguese provinces here are Angola and Benguela. The former contains the town of *St Paul da Loando*, which is the capital of the Portuguese possessions in Western Africa. Benguela contains the town of *St Philip*.

3.—THE EASTERN COASTS.

EXTENT, CLIMATE, POPULATION, &c.—The coasts of Eastern Africa, from the neighbourhood of the equator southward to Delagoa Bay, exhibit features similar to those that distinguish the opposite side of the continent. Low plains stretch along the coast, and are backed by high grounds towards the interior. Numerous rivers occur throughout the entire region, and many of them appear to derive their water from large lakes situated within the plains of the interior. The climate of the lowlands is intensely hot and unhealthy; as the country rises towards the interior, the heat becomes much more moderate. A fertile soil, and a luxuriant vegetation, distinguish this region throughout; but the population consists chiefly of Negro races, who are sunk in almost the lowest condition of barbarism, and amongst whom the horrors of the slave-trade still prevail. The commercial productions, besides slaves, include gold-dust, ivory, gums, bees'-wax, and ostrich-feathers, but the total amount of the trade is inconsiderable.

Two foreign powers—the Portuguese and the Sultan of Muscat—exercise sway over this portion of the African continent. The Portuguese possessions reach from the neighbourhood of Delagoa Bay northward to Cape Delgado. The line of coast which extends between the last-named headland and the equator forms a dependency of Muscat.

The Portuguese territories include the provinces of Sofala and Mozambique, with the lower course of the great river Zambesi. The town of *Sena*, situated on the Zambesi, is the seat of Portuguese government in this part of the world. The towns of *Mozambique*, *Quillimane*, *Sofala*, and *Inhambane* are on the coast, and possess a limited amount of commerce, chiefly with Lisbon. The tract of country through which the Zambesi flows—recently explored by the enterprising traveller, Dr Livingstone—is described as possessing great natural capabilities.

The coast-district lying north of Cape Delgado bears the name of Zanguebar. Among the principal commercial stations on this coast are *Quiloa* and *Zanzibar*, both of which belong to the Sultan of Muscat. Both places are situated on islands, as also is *Mombas*, a little further north.

To the north of the equator, and reaching thence to the neighbourhood of Cape Guardafui, is the coast of Ajan, the native inhabitants of which are a people called the Somauli, of pastoral habits. Westward from this region, towards Abyssinia, they become intermixed with various races, among whom the Galla are predominant. Little is known of this region, which seems to be divided into numerous petty States. One of these (lying in the direction of south-west from the upper part of the Gulf of Aden) bears the name of Hurrur (or Harrar), and is ruled by an Emir. The whole of this tract of country is visited, for commercial purposes, by traders from the coast of Arabia. Ivory, gums, myrrh, and ostrich-feathers, with hides, sheep, and horned cattle, are among the produce which it supplies.

QUESTIONS ON NEGRO-AFRICA.

1. What three divisions does Negro-Africa embrace?
2. Point out upon the map the limits which mark out the plain of central Soudan.
3. What are the chief natural features of Central Africa? Name its rivers, and the great lake which it includes, and point them out upon the map.

4. What kind of climate has this region?
5. What race of people are intermingled with the Negro population of this region? What mode of worship do they follow?
6. What is the religion of the Negro nations called?
7. What are the habits of life among the Negro people of this part of the world? What constitutes the chief obstacle to their improvement?
8. Name the chief commercial productions of this region.
9. Mention some of the principal towns that are situated within this part of Africa, and point out their places on the map.
10. What are the chief natural features of the western coast-region of Africa? Name the principal rivers that are within its limits.
11. What kind of climate has Western Africa?
12. Say what you know concerning the condition of the inhabitants of this region.
13. What commercial productions belong to Western Africa? By what nations is its trade chiefly carried on?
14. What two divisions does Western Africa embrace, to the northward of the equator? What four divisions to the south of that line?
15. Where are Ashantee and Dahomey? What is the chief town of each? Point out their localities on the map.
16. Where are Badagry, Lagos, Bonny, and Abbeokuta?
17. Where is Liberia, and what is the name of its chief town?
18. What European nations possess settlements on the coasts of Western Africa?
19. Name, and point out on the map, the British settlements in this region.
20. Name, and point out, the French and the Dutch settlements.
21. What parts of Western Africa are subject to the Portuguese?
22. Say what you know concerning the climate and commercial productions of the Eastern coasts of Africa.
23. What two foreign powers rule over the chief part of Eastern Africa? Point to the respective localities subject to each.
24. Point on the map to the towns of Mozambique, Quillimane, Sena, Quiloa, and Zanzibar.
25. In what part of Eastern Africa are the people called Somauli found? What are the commercial productions of that region?

SOUTHERN AFRICA.

The southern extremity of the African continent comprehends two distinct and extensive provinces under British rule—namely, the Cape Colony and Natal.

1.—THE CAPE COLONY.

SITUATION, BOUNDARIES, &c.—The Cape Colony derives its distinguishing name from the Cape of Good Hope, one of the most celebrated promontories in the world. It includes that part of Africa which is to the south of the Orange River, and which extends thence to the Atlantic and Southern Oceans in the direction of west and south. Its eastern limit is marked by the Great Kei River, and a line drawn from that stream to the upper portion of the Orange River.

The area of the Cape Colony is not less than 200,000 square miles, which is equal to about four times the size of England.

NATURAL FEATURES.—The southern half of the Cape Colony includes a series of plains, which stretch in the general direction of east and west, parallel to the southern shore of the African continent, and are divided from one another by successive chains of hills. These parallel hill-ranges increase in altitude towards the interior, and reach their culminating height in the chain of the Nieuveld Mountains, the loftiest elevations in Southern Africa. The highest portions of the Nieuveld (or the Sneeu-berg, as they are there called,) attain an elevation of 10,000 feet above the sea. The plain that extends along the southern base of the Nieuveld Mountains is called the Great Karroo, and has an arid and gravelly surface. The lower plains, nearer the coast, are watered and moderately fertile.

The northerly portion of the province, between the chain of the Nieuveld and the course of the River Orange, consists chiefly of extensive open plains, for the most part scantily watered.

The Orange River, which forms the northern border of the Cape Colony, is more than 1000 miles long, but it has comparatively little volume of water, and is not navigable. The other rivers of the colony are numerous, but none of them are considerable streams, and their volume of water varies greatly with the season of the year. Among them are the Oliphant, Breede, Gauritz, Camtoos, Great Fish, Keiskamma, and Great Kei, the last of which forms the extreme eastern limit of the province.

Cape Agulhas and the Cape of Good Hope—the two most important headlands of Africa—are both within the coast-line of the Cape Colony. The former is the most southwardly point of the African continent and of the Old World.

The Cape of Good Hope is important, both from its geographical position and from its place in the annals of discovery. It was discovered by Bartholomew Diaz, a Portuguese navigator (in 1487), towards the close of a century which had been devoted by the Portuguese to the prosecution of maritime discovery along the western side of the African continent. Diaz succeeded in doubling the Cape in this voyage, and landed on the coast at some distance beyond. This feat was justly regarded as preparing the way for a passage to India by

a maritime route.* Ten years later, in 1497, Vasco di Gama (also a Portuguese) conducted the first fleet of ships to India by way of the Atlantic and Indian Oceans, passing, of course, round this famous headland.

CLIMATE, PRODUCTIONS, &c.—The climate of the Cape is temperate, dry, and healthy. The occasional prevalence of droughts is its chief drawback. The extensive open plains of the interior are, however, admirably suited for pastoral pursuits, and the abundance of live-stock reared upon them supply, in the present day, the most valuable produce of the colony. The wool of the Cape-sheep is exported in large quantity to England.

POPULATION AND INDUSTRY.—The Cape Colony has a population which numbers nearly 300,000. These are partly whites and partly coloured races. The greater number of the white population are of British descent, but a considerable proportion are of Dutch origin, owing to the fact that the colony was originally established by the Dutch nation, and only came into the possession of Britain in the early part of the present century. The coloured population comprehends Hottentots and Caffres—the two native races of this portion of the African continent. The pure Hottentots are now few in number: the people of Caffre race are much more numerous, and perhaps amount to a third of the entire population of the province.

The chief pursuit of the settlers at the Cape is sheep and cattle-farming, for which the province is generally better suited than for agricultural operations. A great quantity of wool is annually exported to England, with hides, skins, and tallow, to a less amount. The culture of the soil is, however, carried to a considerable extent, and good corn is grown. The vine (introduced thither from Europe) is cultivated on a scale of some magnitude in the western division of the province, but the wines of South Africa have not generally attained a high place in the market. Considerable commercial intercourse is maintained by the traders of the Cape with India, China, and the island of Mauritius, as well as directly with Britain.

DIVISIONS, TOWNS, &c.—The province of the Cape forms

* Dias had called this long-sought headland (which he erroneously believed to be the extreme south point of the African continent) by the name of "El Cabo Tormentoso"—or the Stormy Cape. The King of Portugal, on his return, changed this name to that which it has ever since borne.

two great divisions—an eastern and a western. The latter is the older-settled, and more populous, portion of the territory.

The chief place in the western division of the Cape Colony is *Cape Town*, which is the capital of the province. Cape Town derives its name from the famous promontory to which it is adjacent. It stands on the shore of Table Bay, in the south-west corner of the province, and has about 25,000 inhabitants. It was originally laid out by the Dutch, and presents in general appearance a great resemblance to the towns in Holland.

Table Bay is so named from its vicinity to Table Mountain—an elongated mass of hill, with a flat top, which rises above its southern shore, and in the immediate vicinity of Cape Town. Table Mountain reaches 3582 feet in height.

The principal place in the eastern division of the province is *Graham's Town*, situated a short distance from the south-eastern coast-line, in the neighbourhood of the Great Fish River. Port Elizabeth, on the shore of Algoa Bay, is the chief place of shipment for this part of the Cape territory.

The Keiskamma River, to the east of the Great Fish River, was formerly the frontier of the colony on this side. The tract of country lying between the Keiskamma and Great Kei rivers (first brought under British rule in 1847) is distinguished as British Caffraria, and is principally occupied by native tribes, of Caffre race. The chief place within this portion of territory is *King William's Town*.

It was not until the year 1847 that the northern frontier of the Cape Colony was extended to the Orange River, an artificial line, drawn considerably to the southward of that stream, having previously marked its limit. The country within the basin of the Orange is still for the most part in the occupation of native tribes, among whom are Namaquas, Koranas, Bosjesmans, and Griquas.

The entire province is under the rule of a Governor appointed by the British Crown.

2.—NATAL.

SITUATION, BOUNDARIES, &c.—The province of Natal lies to the north-eastward of the Cape Colony, and stretches from the shores of the Indian Ocean to a distance of above one hundred miles inland.

The boundaries of Natal are—on the north, the river Tugela; on the south, the river Umzimkulu; on the east, the Indian Ocean; on the west, the range of the Drakenberg, or Kathlamba Mountains. The area of the province is about 18,000 square miles.

NATURAL FEATURES, CLIMATE, &c.—The coast-district of Natal consists of a low plain. This rises gradually towards the interior, attaining an elevation of a thousand feet and upwards in the central and westerly divisions of the province. The summits of the Drakenberg reach 5000 feet above the sea. The province is nearly throughout well watered. The Tugela is the longest of its rivers, all of which discharge into the Indian Ocean.

The climate of Natal is warmer than that of the Cape, and its productions are in many respects different. Within the low districts that adjoin the coast, the vegetation makes near approach to the tropical character. The sugar-cane grows wild, and the cotton-plant is capable of profitable culture. The pine-apple and the fruits of southern Europe flourish. The higher plains of the interior are adapted to the growth of wheat and other cereals of the temperate zone.

POPULATION, &c.—The inhabitants of Natal—about 200,000 in number—are principally Caffres, belonging to that variety of the Caffre race distinguished as Zoolahs. Their occupations are almost exclusively pastoral. The colonial or white population is entirely of British descent. It was not until 1845 that the province was recognised as a British possession: emigration thither has since been in progress from various parts of Britain, and the land is being rapidly brought under cultivation. The culture of cotton is pursued on a limited scale: cotton, wool, and ivory, form articles of export.

The chief town of Natal is *Maritzberg*, which is in the centre of the province, about fifty miles inland. *D'Urban*, on the coast, upon the north side of an inlet called Port Natal, is the principal port of the province.

Natal is under the rule of a Lieutenant-Governor, subordinate in authority to the Governor of the Cape Colony.

Besides the Cape Colony and the province of Natal, Southern Africa also comprehends the independent territory of Caffraria, and the two independent states known as the Orange River Free State and the Transvaal Republic.

Independent Caffraria is the tract of country lying intermediate between the Cape Colony and the south frontier of Natal, and adjoining the Indian Ocean. It reaches from the Great Kei to the Umzimkulu river, and from the sea to the highlands which enclose the upper waters of the Orange river, comprehending an area of about 20,000 square miles. This tract of country is thinly inhabited by various Caffre tribes, whose occupations (when not disturbed by warfare) are chiefly pastoral.

Both the Orange-River Free State and the Transvaal Republic are inland territories. The former embraces the tract of country which is included between the upper portion of the Orange River, and its tributary the Vaal: the latter, as its name implies, stretches beyond the Vaal, towards the more distant interior. Upon the east, both territories are limited by the heights of the Drakenberg. The Transvaal Republic is the more northwardly of the two States. Both have been established, within recent years, by emigrant boers (or Dutch farmers) from the Cape, whose discontent with British rule has led them to seek a home within the distant wilderness of interior Africa. In these newly-formed communities, the Dutch language is the natural tongue of the settlers, who find here a refuge from the irksome restraints of colonial rule, as exercised by a power which is foreign to their own race.

ISLANDS OF AFRICA.

The smaller islands that belong to this division of the globe are for the most part in the possession of various European powers. Spain, Portugal, Great Britain, and France, are the nations by which these sovereignties are possessed.

To SPAIN belong—the Canary Islands and the island of Fernando Po.

To PORTUGAL belong—Madeira and the Cape Verde Islands; with Prince's Island and St Thomas, in the Gulf of Guinea. The island of Annabon, also in the Gulf of Guinea, is claimed by the governments both of Spain and Portugal.

To GREAT BRITAIN belong—Ascension, St Helena, Tristan d'Acunha, Mauritius, Roderigue, the Seychelle Islands, and the Reunion Islands.

To FRANCE belong—the island of Bourbon, or Ré-union, and a few small stations on the coast of Madagascar.

The African islands that are independent of European rule are Madagascar, the Comoro Islands, and Socotra.

The CANARY ISLANDS are an integral part of the Spanish monarchy, and form one of the modern provinces into which Spain has been divided. They comprehend seven principal islands, with several smaller islets, the nearest of the group lying about sixty miles distant from the African mainland. The largest of the number is Teneriffe, the second in size is Grand Canary, the third Fortaventura, and the fourth Lanza-rote. The island of Ferro, the most westerly member of the group, is remarkable from its having been long regarded by the ancients as the extreme westward point of the habitable globe, and its being hence selected as the initial point whence to measure longitude. The meridian of Ferro is still used by several nations for this purpose.

All the islands of the Canary group are mountainous, and of volcanic formation. The Peak of Teneriffe rises to the great altitude of 12,236 feet. They are for the most part fertile, watered, and productive islands, enjoying a warm and healthy climate. Corn, dates, figs, lemons, the vine, sugar, tobacco, cochineal, and barilla, are among their productions. The population (about 227,000) is wholly of Spanish descent. The chief towns are *Santa Cruz*, on the island of Teneriffe, and *Palmas*, on Grand Canary.

FERNANDO Po is the largest of the four islands situated towards the upper extremity of the Gulf of Guinea. It is fertile, but unhealthy, and the settlements which have been made upon it have hence been, in more than one instance, abandoned. Clarence Peak, the highest point of Fernando Po, rises to upwards of 10,000 feet. The inhabitants of Fernando Po are chiefly natives, but there are a few European settlers, together with about a thousand liberated negroes, in the town of *Clarence*, the chief place on the island.

MADEIRA is a beautiful and fertile island, two hundred and

ninety square miles in area,* and measuring thirty-five miles in the direction of its length. It is mountainous, and wholly of volcanic formation, consisting of a mass of basaltic rock. The highest point in the island reaches upwards of six thousand feet above the sea.

The climate of Madeira is particularly celebrated. The air is almost uniformly warm, exhibiting remarkably little variation in its temperature throughout the year. The vegetation is rich and luxuriant in the extreme, the fruits and evergreens of southern Europe growing over all the moderately-elevated portions of the island, and the palm and banana thriving in the lower plains. The vine was long cultivated in Madeira on a scale of great extent, and furnished the chief produce of the island; but it has been completely destroyed by disease within recent years, and great suffering thence occasioned to the inhabitants. The culture of the sugar-cane has been introduced in its stead.

The inhabitants of Madeira number 107,000, chiefly Portuguese. The chief town of the island is *Funchal*, on the south coast. The small island of Porto Santo, to the eastward of Madeira, also belongs to Portugal. It is a dependency of Madeira.

THE CAPE VERDE ISLANDS are an extensive group, situated three hundred and forty miles to the west of Cape Verde. They are ten in number, the largest of them, Santiago, having an area of four hundred square miles. The island of Fogo, one of the number, is an active volcano, and reaches upwards of nine thousand feet in height.

The Cape Verde Islands are less fertile than either Madeira or the Canary group, and they are indifferently provided with water. Some cotton, however, is grown upon them, and also the sugar-cane, with oranges and other fruits. Salt is one of their chief articles of produce. The population of the entire group numbers about 85,000.

The principal towns are *Mindello*, on the island of St Vincent, and *Porto Praya*, on the island of Santiago.

PRINCES' ISLAND and ST THOMAS are inhabited chiefly by a native race, among whom are a few Portuguese settlers. They produce little beyond live stock and vegetables. The former island contains the town of *San Antonio*.

* About twice the size of the Isle of Wight.

ANNABON (which is claimed both by Spain and Portugal) contains also a small native population, and furnishes a similar produce to the two last-named islands.

The island of ASCENSION is nearly a thousand miles distant from Cape Palmas, the nearest point of the African mainland. It is only thirty-four square miles in size, and consists of a mass of volcanic rock, rising to 2870 feet above the sea. Turtle, wild goats, and a few sheep and cattle, constitute its produce. It is used as a station for the British cruisers engaged in the suppression of the slave-trade. *Georgetown*, on the north-west coast of the island, is the residence of a few British settlers, who are its only inhabitants.

ST HELENA is eight hundred miles distant from Ascension, and twelve hundred miles from the nearest point of the African mainland. The whole island is a huge mass of rock, of volcanic origin, rising steeply out of the waters of the Atlantic, and reaching in its highest point 2700 feet above the sea.

St Helena is forty-seven square miles in area. The exterior of the island forms a perpendicular wall of cliff, the principal opening in which is on the north-western coast, where *James-town*, the capital, is situated. The interior exhibits a succession of hills and valleys, some of the latter very fertile. The climate is warm, but the position of St Helena, in the midst of a vast ocean, preserves it from the intense heats of the Torrid Zone. Fruits and vegetables constitute the chief produce of the island. The population numbers about seven thousand.

The chief interest attaching to St Helena is derived from the fact of its having been, during the last six years of his life, the place of exile of Napoleon I., who died there in 1821.

TRISTAN D'ACUNHA is the largest of a group of three islands, lying west by south of the Cape of Good Hope, at a distance of nearly 2000 miles. It is a barren volcanic rock, the highest point of which reaches 6400 feet above the sea. There are a few residents on Tristan d'Acunha: the two other islands of the group are uninhabited.

MAURITIUS, situated in the Indian Ocean, is a beautiful ar-

fertile island, of larger size than any of the other possessions of Britain in the African seas. It has an area of between six and seven hundred square miles—a magnitude about three times greater than that of the Isle of Man.

The surface of Mauritius consists of alternate hills and valleys, the highest portions of the island reaching nearly 3000 feet. The inhabitants, who number 180,000, are largely engaged in the culture of the sugar-cane, which forms the staple of the island. Coffee, cotton, indigo, and rice, are also grown. Though within the Torrid Zone, the climate of Mauritius is healthy, and the heat not excessive. The greater part of the population consists of coloured races (chiefly negro); the majority of the white inhabitants are of French origin, as the island had belonged to France before it came into the possession of Britain, in the year 1810.

Mauritius is surrounded by coral reefs, in which only two openings occur. At one of these openings, on the north-west coast of the island, is the town of *St Louis*, its capital. *Grand Port*, the only other town, is on the opposite side of the island.

The island of Roderigue is three hundred miles east of Mauritius, and is a dependency of that island.

The Seychelle Islands, and also the Amirante group, both of them lying far to the northward, are dependencies of Mauritius. The Seychelles, though composed of granite rock, rest upon a bank of coral, and the Amirante Islands are altogether of coral formation. Some cotton is grown on these groups, and the cocoa-nut palm abounds.

The island of BOURBON—or Réunion, as it is now officially designated—is to the south-west of Mauritius. It is about one-third part larger than that island.

BOURBON contains two lofty volcanic mountains (one of them in frequent activity), and the whole island is of volcanic origin. The level tracts which stretch round the coast are very fertile, and Bourbon has a healthy climate. The population numbers upwards of 100,000. Sugar, cloves, and coffee are the chief articles of produce. The chief town is called *St Denis*.

MADAGASCAR, the largest of African islands, measures 1000

miles in length, and has an area of 200,000 square miles—about four times the magnitude of England. It is crossed by the line of the southern tropic, but is principally within the torrid zone.

Madagascar has a chain of high mountains running through it, and the whole interior forms an elevated plateau. A belt of low land extends round the coast, and forms an extremely unhealthy (though fertile) region. The whole island is believed to possess great fertility, and abounds in rich natural produce—mineral as well as vegetable.

The native population of Madagascar (called the Malagasy) is believed to amount to four or five millions. They are a distinct race from the negro inhabitants of the neighbouring mainland, and are allied to the Malay family of mankind. The whole island is under the sovereignty of the Hovahs, as the tribe dwelling in its most central province are called.

Scarcely any intercourse with Madagascar on the part of Europeans has been allowed during the last thirty years, owing to the hostility with which they have been regarded by the native sovereign. The French possess a small settlement upon St Mary's Island (off the eastern coast, to the south of Antongil Bay), and another on the island of Nos Beh (off the north-western coast). The native capital of Madagascar is the town of *Tananarivo*, in the middle of the island.

The COMORO ISLANDS are situated in the north part of the Mozambique Channel, which divides Madagascar from the African mainland. They are four in number—the largest of them called Comoro—and form a native sovereignty, under a sultan of Arabic descent.

SOCOTRA is an island of considerable size, to the east of Cape Guardafui. It is covered with rocky and generally sterile hills, yielding little produce beyond aloes and a few dates, with the resinous substance known as dragon's blood—the produce of a tree, from the trunk of which it exudes. The inhabitants are chiefly of Arab race, and the sovereignty of the island belongs to the Sultan of Muscat.

QUESTIONS ON SOUTHERN AFRICA AND THE AFRICAN ISLANDS.

1. What two colonies does Great Britain possess in Southern Africa? Point to them on the map.
2. From what famous headland does the larger of these two provinces derive its name? What river forms the northerly limit of the same province?
3. What constitute the chief natural features of the Cape Colony?
4. Name some of the principal rivers of the Cape Colony. Into what oceans do they flow?
5. By what is Cape Agulhas distinguished? Point to it on the map.
6. By whom was the Cape of Good Hope discovered, and in what year?
7. What great event ensued from the discovery of the Cape of Good Hope?
8. Say what you know concerning the climate and productions of the Cape Colony.
9. What races of people are found among the population of the Cape Colony?
10. What are the chief pursuits of the settlers at the Cape? What forms their chief item of export?
11. Name the chief town of the Cape Colony, and also the principal place in the eastward division of the province. Point them out upon the map.
12. What famous mountain is in the vicinity of Cape Town? What (in round numbers) is its height?
13. Which part of the province is known as British Caffraria, and what is the name of its chief town?
14. Point on the map to the province of Natal, and say what you know concerning its natural features and climate.
15. What race of people constitute the chief population of Natal?
16. Name the principal town, and also the chief seaport, of Natal. Point out their places on the map.
17. What other territories (besides the Cape Colony and Natal) are included within Southern Africa?
18. Among the islands of Africa, which belong to Spain?
19. Which of the African islands belong to Portugal?
20. Which of the African islands belong to Great Britain?
21. Which of the African islands belong to France?
22. Point to the following upon the map—Teneriffe, Madeira, Fernando Po, Ascension, St Helena, Tristan d'Acunha, Mauritius, the Seychelle Islands, and Socotra.
23. Name the chief towns of each of the following islands—Madeira, St Helena, Mauritius, and Bourbon.
24. For what is the island of Madeira distinguished?
25. What event distinguishes, historically, the island of St Helena?
26. What constitutes the chief produce of Mauritius? To what nation did that island formerly belong?
27. What kind of natural features does the island of Bourbon exhibit?
28. Give some account of Madagascar, as to its natural features. What is the name of its chief town?
29. Where are the Comoro Islands? Point to their place on the map.
30. Where is the island of Socotra? What articles of produce does it furnish?

NORTH AMERICA.

AMERICA, or the New World, comprehends two great divisions—North and South. These are united by the Isthmus of Panama, which is less than thirty miles across in its narrowest part. Each of these divisions is continental in point of magnitude. North America is the larger of the two, and is wholly within the northern hemisphere.

BOUNDARIES AND EXTENT.—North America is bounded on the north by the Arctic Ocean, on the east by the Atlantic Ocean, and on the west by the Pacific Ocean. To the southward, it passes (below the thirtieth parallel) into a narrow region, within which are embraced Mexico and the states of Central America, and finally terminates in the Isthmus of Panama.

North America differs in shape from any of the continents of the Old World. Its greatest dimensions are from north to south, and it is of narrow proportions comparatively to its total magnitude. The vast oceans upon either side hence exercise a greater share of influence over its climate.

The superficial extent of North America is estimated at 8,600,000 square miles, which is considerably more than double the size of Europe, but hardly equal to half that of Asia.

SEAS, GULFS, AND BAYS.—The eastern coasts of North America are more indented than the western. They make, in variety of outline, nearer approach to the characteristic feature of the European continent than is the case with either of the other divisions of the globe.

The seas on the east side of North America are—Baffin Bay, Hudson Bay, Gulf of St Lawrence, Bay of Fundy, Gulf of Mexico, and Caribbean Sea. All of these are arms of the Atlantic Ocean.

On the west side of North America—the Gulf of California, which is an arm of the Pacific.

On the north side—the Gulf of Boothia, which is an arm of the Arctic Ocean.

STRAITS.—The following are the principal :—

Hudson Strait, which connects Hudson Bay with the Atlantic Ocean.

Davis Strait, which connects Baffin Bay with the Atlantic Ocean.

Barrow Strait, which connects Baffin Bay (by way of Lancaster and Melville Sounds) with the Arctic Ocean.

Melville Sound, which is a westwardly extension of Barrow Strait.

Behring Strait, which connects the Arctic and Pacific Oceans, dividing the continents of North America and Asia.

CAPES.—The principal are :—

On the East Coast.

Cape Farewell (Greenland).

Cape Charles (Labrador).

Cape Race (Newfoundland).

Cape Breton (C. Breton I.).

Cape Sable (Nova Scotia).

Cape Cod (United States).

Cape Hatteras (United States).

Cape Sable (Florida).

Cape Catoche (Yucatan).

Cape Gracias-à-Dios (Cent. America).

On the North.

Cape Barrow (Russian territory).

Cape Bathurst (British territory).

On the West.

Cape Prince of Wales (Russian territory).

Cape St Lucas (California).

Cape Barrow is probably the most northerly point of the American mainland. Cape Charles is the most eastwardly point of North America, and Cape Prince of Wales the most westwardly point.

PENINSULAS.—The four following are on the east side of North America—Labrador, Nova Scotia, Florida, and Yucatan.

The two following are on the west side—Lower California and Alashka.

ISTHMUS.—The most important isthmus in the New World is that of Panama, which connects North and South America. The Isthmus of Panama is a narrow region, of considerable length (between four and five hundred miles), which divides the waters of the two greatest oceans of the globe. Its breadth varies from less than thirty to between seventy and eighty miles.

ISLANDS.—On the east side of North America are—the West Indies, the Bermuda Islands, Newfoundland, Prince

Edward Island, Anticosti, and a few small ialets in the Gulf of St Lawrence.

On the *north* are—Greenland, Cumberland Island, Southampton Island, Cockburn Island, North Devon, Grinnell Land, the Parry Islands, Banks Land, Victoria Land, Boothia, and other little-known tracts of land that lie to the west and northward of Baffin Bay.

On the *west* are—Vancouver Island, the Queen Charlotte Islands, and the islands of the Sitka Archipelago.

The West Indies are an insular region of large extent, and embrace a great multitude of islands, of various size and form. The largest of the number is Cuba; the second in size, Hayti; the third, Jamaica; and the fourth, Porto Rico. All the rest are of much smaller dimensions.

The insular masses of land by which Baffin Bay is enclosed on the east, north, and west, have only been partially explored. Greenland probably embraces a great many distinct islands. The lands to the north and west of Baffin Bay form a vast insular region, the different portions of which are divided by ice-encumbered channels. The largest of the Parry Islands is Melville Island.

MOUNTAINS AND TABLE-LANDS.—The highlands of the New World differ from those of the Old World in some important regards. Their direction is for the most part north and south, and they are situated towards the maritime borders of either continent, instead of within its more central regions. The Asiatic continent presents in this respect a striking contrast to either North or South America.

The two chief mountain-systems of North America are—the Rocky Mountains, and the Alleghany Mountains. The former are towards the western, the latter towards the eastern side, of the American continent. The Rocky Mountains are the chief axis of elevation—the back-bone, as it were—of the North American continent, and their higher portions more than double the altitude of the Alleghany system.

But the Rocky Mountains—though towards the western side of the continent, regarding it as a whole—are yet removed by several hundred miles from the shores of the Pacific. The intervening country consists of a succession of highland regions, bordered on the west by distinct mountain-chains, which latter rival in altitude the main axis of the Rocky-Mountain system. The mountains of the west coast are not

a continuous chain, but a series of detached chains and groups, through the openings between which numerous rivers pass on their course to the Pacific Ocean.

The Rocky Mountains reach in their highest elevations nearly 16,000 feet above the level of the sea. Mount Brown (15,900 feet), and Mount Hooker (15,700), are two of their loftiest points. These and other lofty summits are within the middle and southerly portions of the mountain-system : to the north, the mountains diminish in height, and sink into mere hills as they approach the shores of the Arctic Ocean.

Some of the mountains belonging to the western coasts of North America attain a height which surpasses that of the Rocky Mountains. Mount St Elias and Mount Fairweather, on the border-line between the British and Russian Territory, are two of the highest peaks, and the first-named is said to reach 17,500 feet.

The highest elevations of the Alleghany system scarcely exceed 6000 feet, and the mountains are seldom more than half that altitude.

The entire region situated west of the Rocky Mountains consists of highlands, alternating with mountain-chains and enclosed valleys. The most remarkable portion of this tract is the Plateau of Utah, a territory which is enclosed by mountain-chains on every side, and has its own system of river-drainage, like some of the interior plains of the Asiatic continent.

The highlands which stretch along the western side of North America are prolonged southward into the narrow regions of Mexico and Central America, the whole interior of which consists of elevated plateaus. The highest parts of the Mexican table-lands reach 9000 feet above the sea. Above these plateaus there rise numerous volcanic cones, several of which attain a great height. The loftiest of the number is called Popocatepetl, which reaches 17,770 feet above the sea, and is the highest mountain in North America.

The table-lands of Central America (as the narrower tract of country lying to the south-east of Mexico is called) are less elevated than the Mexican table-lands. Their western side is bordered by a succession of lofty peaks, many of them active volcanoes, which make near approach to the waters of the Pacific.

LOWLANDS.—The whole interior of North America, from the Gulf of Mexico to the Arctic Ocean, and from the Rocky Mountains to the Alleghanies, is a vast lowland-plain. The

northwardly division of this plain slopes towards Hudson Bay and the Arctic Ocean, into one or other of which its rivers are discharged. Its southward portion inclines towards the Gulf of Mexico, and is watered by the great river Mississippi and its tributaries.

The southwardly division of the great plain of North America is the region of the *prairies*.* These are vast natural meadows, which occupy great part of the Mississippi valley, especially in the neighbourhood of the upper Mississippi and the stream of the Missouri. Nearer the mountains, the plain is often covered with woodland tracts. Alternate forest and prairie form, indeed, the distinguishing features of nature in the New World.

To the east of the Alleghany Mountains, there is a lowland-plain of some extent, which borders the Atlantic coast. There are extensive marshy tracts in some parts of this region, towards the sea.

The lowland-plains of the New World bear a much larger proportion to its entire extent than do the highland regions. America differs strikingly in this respect from the Asiatic continent. In Asia, the mountains and highlands fill up the great central regions of the continent, and the lowlands occupy its outer borders: in North America, the lowland-plains constitute the great mass of the continent, and the highlands are limited to the vicinity of the ocean.

RIVERS.—The principal rivers on the east side of North America, named in the order of the seas into which they flow, are—

<i>Into the Gulf of Mexico.</i>		<i>Into the Atlantic Ocean.</i>	
Mississippi ...	through United States.	Connecticut...through	United States.
Grande del Norte}	between { United States and Mexico.	Hudson.....	do.
		Delaware	do.
		Susquehanna	do.
<i>Into the Gulf of St Lawrence.</i>		Potomac.....	do.
St Lawrence....	through Canada.	James	do.
		Roanoke.....	do.
<i>Into Hudson Bay.</i>		Savannah	do.
Nelson	through Brit. America.	Alatamaha.....	do.
Churchill, or }	through do. do.		
Mississippi }			

The chief rivers on the western side of North America are—

<i>Flowing into the Pacific Ocean.</i>	
Fraser	through British Columbia.
Columbia, or Oregon	through United States.
Sacramento.....	through United States.

* French, *prairie*, a meadow.

Flowing into Gulf of California.

Colorado.....through United States.

The chief rivers on the Arctic coasts of North America, all three discharging into the Arctic Ocean, are—

Mackenzie.....through Hudson Bay Territory.
Copperminethrough Hudson Bay Territory.
Back.....through Hudson Bay Territory.

The number and extent of its inland waters are a distinguishing feature of North American geography. Two of the rivers of this continent are greatly superior to any others, and rank among the most considerable rivers on the globe. These are the Mississippi and the St Lawrence.

The Mississippi—measuring from the mouth of the river up to the source of its great tributary, the Missouri—is 4000 miles long. This is a greater length of channel than belongs to any other river in the world. The proper stream of the Mississippi, however (that is, the river which is called by the name of Mississippi throughout), is not more than 2400 miles from its source to its outlet. The Mississippi rises in the midst of the central plain, in the small lake of Itasca. The Missouri rises in the Rocky Mountains, and joins the Mississippi about midway in the course of the latter river, a short distance above the town of St Louis. The Mississippi has a vast number of tributaries, of which the Ohio is (next to the Missouri) the most considerable. The Ohio comes from the Alleghany Mountains, and joins the Mississippi on its left or eastern bank.

The river St Lawrence has a much shorter course than the Mississippi, but it pours into the sea an immense volume of water, derived from the great lakes of which it forms the outlet. Towards its mouth, the St Lawrence becomes a vast estuary, increasing, below Quebec, from twenty-five to upwards of a hundred miles across, from bank to bank.

LAKES.—The principal lakes, with the countries in which they are situated, are as follow:—

Superior.....	{ United States and Canada.	Winnipeg	{ Hudson Bay Ter- ritory.
Michigan	United States.	Athabasca	do. do.
Huron	{ United States and Canada.	Great Slave Lake...	do. do.
Erie	do. do.	Great Bear Lake...	do. do.
Ontario.....	do. do.	Great Salt Lake.....	United States.
St. Clair.....	United States.	Nicaragua	Central America.
		Leon, or Managua...	do. do.

The largest of these is Lake Superior, which is the largest fresh-water lake on the globe. It covers 32,000 square miles, which is about the size of Ireland, and is more than double the size of either Switzerland, Holland, or Greece.

The five great lakes—Superior, Michigan, Huron, Erie, and Ontario—have together an area of more than 90,000 square miles, which exceeds that of the whole island of Great Britain. These lakes are united by channels which pass from one to the other, the whole forming a continuous body of water, and the river St Lawrence connects them with the ocean. The water of Lake Champlain also passes (by the river Richelieu) into the St Lawrence.

One thing deserving of special notice in the physical geography of North America, is the way in which its river-basins are connected with one another—there being in several cases no intervening high ground between their respective waters. The source of one of the small tributaries of the upper Mississippi is only a few miles' distance from a stream which flows into Lake Winnipeg (the Red River), and there is nothing but a tract of meadow between the two. Again, from Lake Wollaston (one of the smaller lakes of the great plain, to the south-east of Lake Athabasca,) there issue two streams, one at each extremity of the lake. One of these streams ultimately finds its way into the river Churchill, which discharges into Hudson Bay: the other passes into Lake Athabasca, which belongs to the basin of the Mackenzie River. This peculiarity in the river drainage of the North American continent results from the generally level nature of its vast interior, and is highly important, as adding to its facilities for extended inland navigation.

EXAMINATION QUESTIONS.

1. What isthmus connects North and South America? Point to it on the map, and say how many miles it is across in its narrowest part.
2. By what oceans is North America bounded on the east, north, and west?
3. What, in round numbers, is the area of North America? What proportion does this bear to the magnitude of Europe? What to that of Asia?
4. Name the seas, gulfs, &c., on the east side of North America, pointing them out upon the map.
5. Point to the following on the map:—the Gulf of Boothia, Gulf of California, Gulf of St Lawrence, and Bay of Fundy.
6. What strait forms the entrance to Baffin Bay? What to Hudson F? Point to each on the map.
7. What strait and sound connect Baffin Bay with the Arctic Ocean?

8. Name as many as you can of the principal capes of North America. Which among them is the most northerly point of the continent? Which the most westerly?
9. What four peninsulas belong to the eastern side of North America?
10. What two peninsulas are on the western side of this continent? Which is the more northerly of the two?
11. Name as many as you can of the islands on the eastern side of North America, pointing to them on the map.
12. Name some of those on the northern side of the continent.
13. Where is Vancouver Island? Point it out upon the map.
14. Which is largest among the islands of the West Indies? Which second in size? Which third?
15. In what characteristic do the high lands of the New World differ from those that belong to the Asiatic continent?
16. Name the two chief mountain-systems of North America, and point them out upon the map. Which of the two reaches the greater altitude?
17. What kind of country extends along the Pacific coasts of North America between the Rocky Mountains and the sea?
18. In what part of North America are the following:—Mount St Elias, the plateau of Utah, and the table-lands of Mexico? Point them out on the map.
19. Name the highest among the volcanic cones that rise above the Mexican table-land.
20. What portions of North America form a great lowland-plain? By what mountains is this bordered on the east and west?
21. What are prairies, and in what part of North America do they occur?
22. Among the rivers of North America, which two flow into the Gulf of Mexico? Which one into the Gulf of St Lawrence?
23. What two rivers flow into Hudson Bay? Trace out their courses on the map.
24. Name as many as you can of the North American rivers that flow directly into the Atlantic, and find them out upon the map.
25. What four rivers belong to the Pacific coasts of North America? Which one of them flows into the Gulf of California?
26. What three rivers flow into the Arctic Ocean?
27. Among the rivers of North America, which two are of superior importance to the others? Trace the courses of these two rivers on the map.
28. Which is largest among the lakes of North America? What four other lakes, of large size, are connected with this? Point to all five upon the map.
29. Point on the map to the following:—Lake Winnipeg, Great Bear Lake, Lake Athabasca, Lake Nicaragua, and the Great Salt Lake.
30. What condition of physical geography deserves to be specially noted in regard to the rivers of North America? Why is this important?

CLIMATE AND NATURAL PRODUCTIONS.—The climate of the New World is slightly colder, in corresponding latitudes, than that of the Old World. This is the case both in North and South America, but is more especially so in the former. This is easily accounted for. The broadest parts of America are those which stretch into its higher latitudes: within the tropics, North America is narrowed by the near approach of oceans upon either side.

The American climate is also, for the most part, moister than that of the eastern division of the globe. The quantity of rain which falls in some parts of tropical America is surprisingly great—exceeding greatly the rain-fall of southern Asia and the neighbouring archipelago. Within temperate latitudes, the amount is generally greater than in correspondent regions of the Old World.

The eastern side of North America is colder than the western side, and is also liable to greater extremes of heat and cold at opposite seasons. In these respects, the northern half of the New World resembles the European and Asiatic continents, upon the other side of the globe. All the country to the east of the Rocky Mountains is liable to severe winters, and to summers of intense heat. The Atlantic coasts of the United States, and the regions adjacent to the Gulf of St Lawrence, offer striking examples of this. Quebec is in nearly the same latitude as Paris, but it has a lower average of yearly temperature, while its summers are hotter and its winters colder than those of the French capital. The coast of Labrador stretches through the same parallels of latitude as the shores of Britain, but the climate of the two regions is widely different. The winter of Labrador is one of intense and long-continued severity, and its shores are rendered unapproachable by ice during many months of each year.

The islands of the West Indies, the coasts of Central America, the low plain at the foot of the Mexican plateau, and the southernmost portions of the United States, are the hottest regions of North America. The coldest parts are those that stretch from Hudson Bay towards the shores of the Arctic Ocean.

METALS AND MINERALS.—The mineralogy of America is equally varied as that of the Old World, and is perhaps (in some respects) richer. The country lying to the west of the Rocky Mountains is one of the chief gold-producing regions of the world. California, within the United States, and British Columbia, further to the northward, are the great localities of auriferous deposit. Mexico is also a region of great mineral wealth, and its mines supplied at a former period considerable amounts of both gold and silver.

The countries on the eastern side of North America—especially in the neighbourhood of the Alleghany Mountains and the St Lawrence basin—are rich in the more useful productions of the mineral kingdom,—iron and other metals, with

The coal-fields of the United States are of vast extent and great value. Coal also occurs in New Brunswick, Nova Scotia, and Cape Breton Island. Canada is rich in ores of iron, copper, and lead.

VEGETATION.—The native vegetation of the New World differs in many important particulars from that belonging to the continents of the eastern hemisphere. Many of the plants and trees that are common in the Old World are not found upon the opposite side of the Atlantic Ocean; while, on the other hand, the productions of the American soil are in numerous instances peculiar to that portion of the globe. Even in the case of plants which belong to the same *genus* (or family), the species that are found in the opposite hemispheres are nearly always distinct. These differences are independent of climate, for the plants (and also the members of the animal kingdom) that belong to either continent are continually transported by man to regions distant from their native seat, and are found to flourish wherever the conditions of soil and climate are suitable to their development. The vegetation and zoology of the New World at the present time has become, in virtue of such changes, different in many respects from what it was three and a half centuries since, when Europeans first planted their footsteps upon its shores. Numerous plants, and also numerous animals, which were *then* only found within the limits of Europe or Asia, now flourish within the valleys of the Mississippi and the St Lawrence; while, on the other hand, the native productions of America have become distributed over the different regions of the Old World.

The characteristic differences between the vegetation of America and that of the continents belonging to the eastern half of the globe are least marked within high northerly latitudes, and become greater with every advance towards a more southern sky. The lands that lie in proximity to the Arctic Circle possess many features in common, alike in regard to plants and animals.

Of food-plants native to the New World, maize (or Indian corn), among the cereals, and the potato, among tuberous roots, are the two of greatest importance, and the distribution of which through other lands has conferred the greatest boon upon man. Maize is the only one of the cereals that is native to the American continent.

The manioc (or cassava), and arrow-root—both belonging to the order of tubers*—are also among the native food-plants of America. The manioc-plant is a native of Central America, but is more abundantly distributed within the southern half of the New World. The tobacco-plant—now extensively diffused through other lands—is another of the characteristic productions of the American soil, though not exclusively a native of that region.

Plants of the *cactus* tribe are among the native productions of tropical America. The azalia and magnolia, among the ornaments of our greenhouses, are also derived from the New World.

The forests of the North American continent are of vast extent, and the timber which they supply forms one of the most valuable articles of American produce, in a commercial sense. The variety of trees—mostly of the deciduous kind—is astonishingly great. But they exhibit, in nearly all cases, specific differences from the like trees that flourish in the correspondent latitudes of Europe and Asia.

ZOOLOGY.—When America was first visited by Europeans, it had none of the domesticated animals that are familiar to our common observation. Neither the horse, the ass, the common ox and sheep, the hog, the camel, nor the elephant, are native to the New World. Similarly, among carnivorous quadrupeds, the lion, tiger, leopard, and hyena, are unknown in the American wilderness. The puma and the jaguar—natives of tropical America—are the most formidable of its carnivora, but they are decidedly inferior, both in strength and ferocity, to the lion and tiger of the Old World. In the higher latitudes of North America, the numerous wolves, foxes, and bears, with the Canadian lynx, exhibit nearer approach to the zoology of correspondent regions in the eastern half of the globe, and the moose-deer or elk supplies a parallel to the rein-deer of northern Europe.

The bison, or American buffalo, is one of the most characteristic animals native to the American prairie, but it has never been domesticated. The musk-ox, and other members of the deer kind, also occur. The beaver, and numerous fur-

* Tubers are those plants which have knobs or lumps attached to their roots. The potato and the yam are the two most important of the edible tubers. The dahlia, among flowers, is a familiar example of this class of roots. The dahlia is a native of Mexico.

bearing animals, abound in the colder latitudes of the American continent.

The birds of America, and also the reptiles, insects, and other members of the animal world, are in nearly all cases different from those of other continents. The aquatic birds, within very high latitudes (that is, beyond the Arctic Circle), and also some of the members of the insect tribe, in similar localities, offer the only exception to this. The true humming-birds are peculiar to America. The rattle-snake and the boa-constrictor are also American. The moist climate and abundant vegetation of the New World favour the development of the class of life to which the various members of the reptile and insect orders belong.

The *population* of North America perhaps numbers about forty millions of souls. Three-fourths of these are whites, members of the European division of mankind. The remaining fourth consists of negroes, native Indians, and mixed races.

The native man of America is the red (or copper-coloured) Indian—one of the five leading varieties into which the human family is commonly divided. The numbers of this race have vastly diminished since the period of European settlement in the New World, and they are still diminishing rapidly. Within the whole vast territory of the United States, there are fewer than half a million of the native American race now left. They are more numerous within Mexico and the states of Central America, where the genuine Indian is intermixed with the members of a half-caste race.

The white population of the United States and the St Lawrence valley comprehends members of most European lands, but those of British descent are by far the most numerous. Hence the English language has become diffused over much the larger portion of the North American continent. Within tropical America, the Spanish tongue is generally prevalent, since the white population of Mexico and the Central American States is almost exclusively of Spanish origin.

EXAMINATION QUESTIONS.

1. In what respect does the climate of the New World differ from that of the Old World, in correspondent latitudes? Can you account for this?
2. Comparing the eastern and western coasts of North America, what characteristic difference of climate do they exhibit? In what other parts of the globe is a like difference observable?

3. What localities in North America can you mention as furnishing examples of the differences between America and European climates in similar latitudes?
 4. Which are the hottest parts of North America? Which the coldest? Point to each locality on the map.
 5. What parts of North America constitute rich gold-producing regions? Point them out on the map.
 6. In what parts of North America are coal and iron abundant?
 7. In what respect do the plants and animals that are found within the New World in the present day differ from those which characterised it three centuries and a half since?
 8. Which parts of North America make the nearest approach in their native vegetation and zoology to the productions of a like kind in the Old World?
 9. Among food-plants, mention some that are indigenous to the New World.
 10. Among the domesticated quadrupeds, name some that were unknown to the New World at the period of its discovery by Europeans.
 11. Which two animals are the most formidable among the carnivora native to the New World?
 12. What animal represents, in the zoology of North America, the rein-deer of Northern Europe?
 13. Mention any others among the native American quadrupeds that are known to you.
 14. Mention some of the characteristic examples among birds and reptiles?
 15. What conditions of the American climate favour the development of reptile and insect life?
 16. To what division of the family of man do three-fourths of the population of North America belong?
 17. Besides the above, what other families of mankind are represented in the population of America?
 18. In which parts of North America does the English language prevail? In which parts the Spanish tongue?
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COUNTRIES OF NORTH AMERICA.

BRITISH AMERICA.

BOUNDARIES AND EXTENT.—The possessions of Great Britain within the New World comprehend more than a third part of the North American continent, together with several of the adjacent islands.

British North America is bounded on the north by the Arctic Ocean, on the south by the United States, on the east by the Atlantic, on the west by the Pacific Ocean and the territory of Russian America. The area comprised within these limits is not less than three million square miles, which is more than three-fourths the size of the European continent.

The whole of this vast territory is under the recognise-

authority of the British crown, but only particular portions of it have been constituted regular colonies, under organised forms of government. These colonies are six in number—namely, Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and British Columbia.

Five of the colonies in British North America are situated in the south-eastern portion of the territory, within the basin of the St Lawrence, or adjoining the gulf of that name. The remaining one—British Columbia—is on the opposite side of the continent, between the Rocky Mountains and the Pacific Ocean.

1. CANADA includes the chief part of the valley of the St Lawrence, from its mouth upwards, together with the northern shores of the great lakes. For a short distance below its issue from Lake Ontario, the river St Lawrence forms the boundary between Canada and the United States, but through the greater part of its course both sides of the river are British territory. Upon the west and north, Canada has no defined frontier, but its limits are held to include all the tract of country watered by rivers that belong to the basin of the St Lawrence. The area embraced within these limits is about three times larger than the entire group of the British Islands. The river Ottawa, which is the largest among the tributaries of the St Lawrence, divides Canada into two parts—Canada East and Canada West, or, as they are more popularly called, Lower and Upper Canada.

Lower Canada is that portion of the St Lawrence valley which is towards the mouth of the river, and below the junction of the Ottawa. Upper Canada extends from the Ottawa upwards, along the northern side of the great lakes, as far as the north-western shores of Lake Superior. A large portion of it is almost enclosed between three of these lakes—Ontario, Erie, and Huron.

2. NEW BRUNSWICK is to the eastward of Canada, and is of much smaller size than that province. It borders the western side of the Gulf of St Lawrence, and is divided from the United States by a small river called the St Croix, which enters the Bay of Fundy. New Brunswick includes the chief part of the valley of the river St John, which also flows into the Bay of Fundy.

3. **NOVA SCOTIA** is a peninsula lying to the south-east of New Brunswick, and nearly enclosed between the waters of the Atlantic, the Gulf of St Lawrence, and the Bay of Fundy. The island of Cape Breton, which adjoins the eastern extremity of Nova Scotia, is politically attached to it, and forms part of the same colony.

4. **PRINCE EDWARD ISLAND** is within the southern portion of the Gulf of St Lawrence, nearly adjacent to the shores of Nova Scotia and New Brunswick, from which it is divided by Northumberland Strait. In size it nearly equals the English county of Norfolk.

5. **NEWFOUNDLAND** is a large island which forms the eastern limit of the Gulf of St Lawrence, and is surrounded in other directions by the Atlantic Ocean. It has an area which is about one-eighth part greater than that of Ireland. The coasts of Newfoundland are deeply indented, and form numerous bays. The south-eastern division of the island is almost divided from the main body of the land by the deep bays which penetrate its coast-line.

NATURAL FEATURES, CLIMATE, &c.—The river St Lawrence, and the chain of lakes from which it issues, are the great natural features of Canada. Everything in the geography, climate, and natural resources of Canada is connected with the great river, and its still greater lakes. The St Lawrence and its lakes are to Canada what the river Nile is to Egypt. The towns succeed one another along the river's course, and population spreads in the direction of the lakes which form a portion of its valley.

The climate of Canada is severe within the lower portion of the province, but is much more genial and temperate within its upper division. The portion of Upper Canada which is enclosed between the great lakes, in particular, enjoys a temperate and a delightful climate. In Lower Canada, the winter is a season of intense and prolonged cold, which lasts through seven months of the year. The ice with which the St Lawrence is annually covered does not break up until April, and rarely disappears before the middle of May. But during the greater part of this time the air is dry, the sky clear, and the cold healthy and invigorating. The seasons of spring and autumn are of exceedingly brief dura-

tion, summer and winter succeeding one another with a rapidity which is truly astonishing to the natives of countries that are differently circumstanced in such regards.

The climate of the neighbouring provinces does not differ materially from that of Canada. Prince Edward Island has a milder and more equable temperature than that of the adjacent mainland, and the winter of Newfoundland, though severe, is less so, on the whole, than that of Lower Canada. But the vast fields of ice which float past its shores, towards the breaking-up of the winter season, act injuriously upon the climate of Newfoundland, both by tendency to prolong the cold, and by producing the fogs and moist vapours which are a well-known characteristic of the adjacent seas.

Among the natural resources of the St Lawrence valley, the produce of the forest takes the first place. The forests (consisting chiefly of trees belonging to the pine tribe) are still of vast extent, notwithstanding the immense supply of timber which they have yielded for a long term of years. In fact, the supply of timber from the banks of the St Lawrence and the Ottawa may be said, for all practical purposes, to be inexhaustible. The mineral resources of Canada are great, and the ores of iron, lead, copper, and other metals—abundantly distributed throughout the province—are being turned to account.

In the more eastward of the provinces here referred to, and especially in Newfoundland, the fisheries constitute a great source of wealth. In Newfoundland, they supply the principal articles of produce, and employ nearly the entire population of the island. The cod-fishery (which is the most important) is pursued not only in the neighbourhood of the shores, within the gulfs which everywhere indent the coast of Newfoundland, but also over the extensive submarine banks to the south and south-eastward of the island.

POPULATION AND INDUSTRY.—Canada contains upwards of two million inhabitants, and the four other colonies (New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland) together about three-quarters of a million. The population of Upper Canada has increased within late years at a surprisingly rapid rate, owing to the extensive immigration from Great Britain and Ireland, and is still increasing fast.

The great bulk of the population, in all of the provinces, are of British descent, excepting only in Lower Canada, where the majority are of French origin—descendants of the settlers in Canada prior to its falling under the arms of Britain, in 1763.

The labours of the field and the forest are the prime objects of the Canadian settler's industry. The soil of Canada possesses surprising fertility, and, when cleared of the timber by which it is everywhere naturally covered, yields the most abundant crops. All the cereals of the Old World are grown, as well as maize, and wheat forms an important item of export, especially from Upper Canada. But timber and other forest-produce (as pot and pearl ash) are the great source of wealth, and stand first in the list of exports.

DIVISIONS AND TOWNS.—The chief towns in the provinces of British North America are as follow :—

<i>Colonies.</i>		<i>Towns.</i>
CANADA {	LOWER	Quebec, Montreal.
	UPPER	Ottawa, Toronto, Kingston.
NEW BRUNSWICK.....		Fredericton, St John's.
NOVA SCOTIA (with CAPE BRETON ISLAND)....		Halifax, Sydney.
PRINCE EDWARD ISLAND.....		Charlotte Town.
NEWFOUNDLAND		St John's.
BRITISH COLUMBIA.....		New Westminster.

Quebec, the chief city of Lower Canada, has hitherto ranked (with some intervals of exception) as the capital of the whole province. It stands on the north bank of the river, in a commanding position, and enjoys a large share of commerce. The victory gained over the French by the gallant Wolfe, in 1759, on the plains of Abraham, immediately without the town, ensured the transfer of Canada from French to English rule, and preserves to Quebec a conspicuous place in the page of history. *Montreal*, further up the St Lawrence, is situated on an island in the river, immediately below the junction of the Ottawa. The city of *Ottawa*, selected as the future capital of Canada, lies on the river Ottawa, about 90 miles above its outlet, and is one of the most rapidly-increasing places in the province. *Toronto* and *Kingston* are both situated on Lake Ontario—the former on the north-west shore of the lake, and the latter immediately above the point where the St Lawrence issues from its waters.

The river Niagara, and the magnificent Falls of that name, are upon the border-line between Canada and the United States. The river Niagara connects Lake Erie with Lake Ontario, and has a course of about thirty miles between the two lakes. The surface of Lake Erie lies at a level of more than three hundred feet above the surface of Lake Ontario. Midway between the two, the river is precipitated

vast ledge of rock, forming in its descent of one hundred and sixty-two feet the Falls of Niagara, the most stupendous waterfall in the world.

Fredericton, the capital of New Brunswick, stands on the river St John, eighty miles above its mouth; but the town of *St John*, at the outlet of the river into the Bay of Fundy, is a more considerable place, and commands the chief share in the maritime trade of the province. *Halifax*, the chief city of Nova Scotia, is distinguished chiefly for its fine harbour and its importance as a packet-station. *Sydney* is a small place on the island of Cape Breton: *Charlotte Town*, the capital of Prince Edward Island, is also only of small size.

St John's, Newfoundland (as it is called to distinguish it from the city of that name belonging to New Brunswick), is not only the capital of the province, but is the only place deserving to be called a town which the island contains. All the settlements in Newfoundland are in the immediate neighbourhood of the coast, and the interior of the island is comparatively unknown.

BRITISH COLUMBIA is the latest organised of the British territories in the New World, having only been formed into a colony in 1858. The discovery of rich gold-fields within the valley of the river Fraser led to this measure—an extensive emigration thither having at once commenced. Vancouver Island, which lies within the adjacent waters of the Pacific, is attached to the government of this province.

The colony of British Columbia includes the tract of country lying between the Rocky Mountains and the Pacific Ocean, and extending northward from the United States frontier to one of the branches of the Peace River (lat. $57^{\circ} 20'$), comprehending an area of about 225,000 square miles. The natural features of the province are extremely diversified. Of its numerous rivers, the Fraser is the most considerable, and it is within the valley of the Fraser and its tributary streams that the rapidly-increasing population is chiefly distributed. The climate of the province, so far as is yet ascertained, is temperate and healthy, and the forest vegetation is rich and luxuriant in the extreme. The town of *New Westminster*, on the north bank of the Fraser, eight miles above its entrance, is the capital.

Vancouver Island is divided from the mainland of British Columbia by a channel called the Gulf of Georgia. It has an area of 14,000 square miles, and includes (besides a small number of British settlers) a native Indian population amounting to about 10,000. Vancouver Island furnishes good coal. The town of *Victoria*, near the southern extremity of the island, has formed the temporary seat of government for the province of British Columbia.

Each of the six provinces above described forms a distinct colony, and is under the administration of a governor appointed by the British crown. The remainder of the British possessions in this region is under the territorial jurisdiction of the Hudson Bay Company, and is hence known as the Hudson Bay Territory.

THE HUDSON BAY TERRITORY embraces a vast region, which stretches from Canada to the Rocky Mountains and the Arctic Ocean. It includes the whole tract of country watered by the rivers that fall into Hudson Bay (of which the Nelson and the Churchill are the principal), besides the valleys of the Mackenzie, Coppermine, and Back rivers, in the direction of the Polar Sea. Lake Winnipeg is within the southern portion of the territory. The great river Saskatchewan, formed by the junction of two branches which rise in the Rocky Mountains, flows into this lake on its north-western shore, as a stream called the Red River does from the southward. The river Nelson issues from the northern extremity of the lake, and connects it with Hudson Bay.

The basin of Lake Winnipeg, with the valley of the Saskatchewan, are probably the most fertile and valuable portion of the whole territory. Extensive forests, alternating with tracts of prairie-land, cover the southwardly division of this great region, which becomes colder with each succeeding parallel of latitude, until it passes towards the extreme north into a dreary and barren wilderness.

The fur-bearing animals which have their home in this extensive region have hitherto supplied its sole produce of value, and the collection of their skins forms the object for which it is frequented by the servants of the Hudson Bay Company. But it has (at least in some parts) capabilities of another description. Large portions of the territory are said to abound in mineral deposits; and there are extensive tracts which are well

suited for the purposes of agricultural settlement. The population (except within the tract surrounding Lake Winnipeg) is exceedingly thin and scattered, consisting of a few tribes of Indians, whose numbers are fast diminishing. On the shores of the Polar Sea, and within the extensive insular region that adjoins Baffin Bay, are found the Esquimaux—a people of smaller stature than the Indians, who subsist principally by fishing, passing the long and severe winter in hollows burrowed within the snow.

At various intervals throughout this territory, the Hudson Bay Company maintain fortified posts or stations, for the purpose of collecting the furs. The principal of these is *Fort York*, on the banks of Hayes River, a short distance above its entrance into Hudson Bay.

The tract adjoining the southern end of Lake Winnipeg is known as the Red River Settlement. This contains a settled agricultural population of a few thousand persons, chiefly emigrants of Scotch descent, with old servants of the Hudson Bay Company, and a few Indians and half-castes. The Red River Settlement is the central seat of the colonial diocese of Rupert Land—which name is applied to the whole region between Hudson Bay and the Rocky Mountains.

The extreme eastern part of the British territory in North America is the coast of Labrador. The native inhabitants of Labrador are Esquimaux, among whom a few missionaries of the Moravian persuasion are settled.

The western coasts of GREENLAND, lying along Davis Strait from the neighbourhood of Cape Farewell northward to beyond Disco Island, belong to Denmark, and contain a few Danish settlements. The most northerly of these is Uppernavik, in latitude 72° 50'. The native population consists of Esquimaux.

The extreme north-western portion of the North American continent belongs to Russia.

The RUSSIAN TERRITORY in America includes a large tract of country, the coasts of which are visited by the Russian traders for the sake of the fur-trade, as well as for the fisheries carried on thence. The interior is little known. The coasts

are for the most part deeply indented, and abound in good harbours, both upon the mainland and the numerous adjacent islands. *New Archangel*, on the group of the Sitka Islands, and *Michaelovski*, on the shore of Norton Sound, are the two chief stations of Russia in this part of the world.

QUESTIONS ON BRITISH AMERICA.

1. How is the British territory in North America bounded? What (in round numbers) is its area?
2. How many colonies does Britain possess within this region? Name them, and point to them on the map.
3. What great river flows through Canada? Name the largest among the tributaries of this river, and point it out upon the map.
4. What river flows through the province of New Brunswick, and into what sea does it fall?
5. Where is Cape Breton Island? To which of the British colonies in this region is it attached?
6. Where are Prince Edward Island and Newfoundland? Point them out upon the map.
7. What constitute the chief natural features of Canada?
8. Give some account of the climate of Canada. Which part of the colony—Upper or Lower—is most favourably circumstanced in this regard?
9. By what circumstance is the climate of Newfoundland affected?
10. Among the natural resources of the St Lawrence valley, what takes the first place in order of importance?
11. In what do the resources of Newfoundland chiefly consist?
12. Say what you know concerning the population of the British colonies in this region—as to their origin, and their industrial pursuits.
13. Name the chief towns of Canada, and point them out upon the map. Say which of the number are within Lower, and which in Upper, Canada.
14. By what event is Quebec historically distinguished?
15. Name the chief towns, respectively, of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland.
16. Where are the Falls of Niagara? Between what two lakes does the river Niagara flow?
17. Where is British Columbia? What considerable river flows through this province?
18. What island nearly adjoins the coast of British Columbia? What town does it contain?
19. What part of British America is distinguished as the Hudson Bay Territory? Point to its limits on the map.
20. Where is Lake Winnipeg? What river enters this lake on its north-western shore? What river at its southern extremity?
21. What article of produce is derived from the Hudson Bay Territory?
22. In what part of this territory are the people called Esquimaux found? What is their chief pursuit?
23. Where is the tract known as the Red River Settlement? By whom is it inhabited?
24. Where is Labrador? Who constitute its native inhabitants?
25. Where is Greenland, and what portion of that region is under the dominion of Denmark?
26. Where is Russian America? For what purposes is it frequented by the Russian traders?

THE UNITED STATES.

BOUNDARIES, &c.—The UNITED STATES OF NORTH AMERICA stretch from the Atlantic Ocean to the Pacific, and from the great lakes to the Gulf of Mexico, embracing a vast territory, which has a superficial extent of more than three million square miles.

The territory of the United States is bounded on the north by British America, on the east by the Atlantic Ocean, on the south by the Gulf of Mexico and the states of the Mexican Confederation, and on the west by the Pacific Ocean.

MOUNTAINS AND PLAINS.—The Rocky Mountains, the Alleghany Mountains, the immense valley of the Mississippi river, and the great lakes belonging to the basin of the St Lawrence, are the most important amongst the natural features of this part of the American continent.

The whole of the Alleghany mountain-system is within the United States, and the plains that stretch along the Atlantic shores, between the mountains and the sea, are the oldest settled portions of the union.

The Rocky Mountains stretch through the westwardly division of the United States territory. The Rocky Mountains here attain an average elevation of between seven and eight thousand feet, while the summits known as Long's Peak, James's Peak, Pike's Peak, and others, reach twelve thousand feet and upwards.

To the West of the Rocky Mountains is the plateau of Utah—an enclosed table-land similar to those of the Asiatic continent, watered by a system of rivers that have no outlet to the ocean. This plateau is bordered on its western side by a high mountain-range called the Sierra Nevada, the summits of which reach upwards of ten thousand feet, and are covered with perpetual snow. The valley of the Sacramento river is between the Sierra Nevada and a lower mountain-range which borders the Pacific Ocean.

The vast region intervening between the Rocky Mountains and the Alleghany system is the valley of the Mississippi, a lowland plain of great natural fertility, within which is included the region of the prairies.

RIVERS AND LAKES.—The most important river of the United States is the Mississippi, with its numerous tributary streams. The Mississippi is navigable from the Gulf of Mexico nearly to its source, by the direct arm of the river,

and by the Missouri branch to the point where that stream issues from the Rocky Mountains.

The eastward portion of the United States—that is, the plain along the Atlantic coast—includes all the rivers enumerated in page 263 as flowing into the Atlantic. The most important amongst them is the Hudson, from the fact of New York, the commercial metropolis of the Union, being situated at its mouth.

Of the five great lakes belonging to the St Lawrence basin, one—Lake Michigan—is wholly within the United States. The other four form part of the border between the United States and the British province of Canada.

To the west of the Rocky Mountains, the United States include the valleys of the Colorado, Sacramento, and Columbia rivers. The upper portion of the last-named stream, however, is within British Columbia.

CLIMATE, &c.—So vast a territory as that of the United States necessarily comprehends great variety of climate and natural produce. In the southern portions of the Union—towards the peninsula of Florida and the shores of the Mexican Gulf—the heat is very great, and the productions of the soil are those of a sub-tropical region. In the middle and north, the climate is temperate—the *average* heat not greater than that of the British Islands, though the extremes of summer and winter temperature are much more considerable. Intensely hot summers and severe winters characterise the cities on the Atlantic sea-board of the United States.

The natural resources of this great territory are abundant and varied. The United States include many of the most productive and fertile portions of the American continent. Their mineral wealth is great, and their agricultural capabilities are almost boundless.

California—the most westwardly state of the Union, and the only one that borders upon the Pacific—is only rivalled by Australia in the abundance of its gold-produce. The gold-fields are within the valley of the Sacramento river. Since 1848, when they were first worked, the gold-fields of California have supplied annually a quantity of gold exceeding in value £10,000,000 sterling, which is more than the previous yearly produce of the entire globe amounted to. The eastern division of the Union embraces (within the Alleghany region and the upper portion of Ohio valley) a coal-field of vast extent, with abundance of iron and other metallic ores.

POPULATION AND INDUSTRY.—The population of the United States amounted, in 1850, to upwards of twenty-three millions, of whom nearly twenty millions are of white or European race. The great bulk of these are of British descent, and their numbers (besides the rapid increase from natural causes) are constantly increased by immigration from the British Islands and elsewhere. The English language is the prevailing tongue throughout the Union. There are, however, numerous settlers from Germany, Holland, France, and other countries of Europe.

More than three millions and a half of the population of the United States belong to the Negro race, and the vastly greater number of them are in a condition of slavery. The free blacks are fewer than half a million. There are but few of the aboriginal Indians left, not more than four hundred thousand within the whole of this immense territory.

The culture of the soil forms the predominant pursuit with the population of the United States. The vast tracts of prairie-land are being rapidly brought under the plough, and the valley of the Mississippi is now occupied by an agricultural population. In the southern and south-western divisions of the Union, cotton, rice, tobacco, and sugar—in its middle and northerly divisions, maize, wheat, and other grains—constitute the objects of agricultural industry. Cotton is the great article of produce, and its export (to Britain) is the most important branch of the foreign commerce of the States. South Carolina, Georgia, and portions of the adjacent States, are the chief seat of the cotton-culture, which (as well as that of the rice, tobacco, and sugar, grown within the Union) is carried on exclusively by slave labour.

The north-eastern States are the most manufacturing portions of the Union. It is there that population is most dense, and that the possession of coal and iron gives facilities for the pursuit of manufacturing industry.

The foreign commerce of the United States is immense, and is second in amount only to that of Britain. The American flag is seen in every part of the world, and the ships of the American merchant command a large share in the carrying-trade between distant regions. The exports of American produce—raw cotton being at the head of the list—employ a vast amount of shipping.

The commerce of the United States, as a whole, consists in

the export of produce of the soil (cotton, rice, tobacco, corn, timber, &c.), and the import of manufactured goods. It is carried on to a vastly larger amount with Great Britain than with any other nation. The raw cotton of America is the material upon which the artisans of Manchester exercise their industry, and the prosperity of the manufacturing population of Great Britain is indissolubly bound up with that of the cotton-growers upon the American side of the Atlantic.

DIVISIONS, &c.—The United States of North America are a confederation of States, associated under a general government for common purposes, while each State has a government of its own. Originally only thirteen in number, they have become increased (by the admission of fresh members into the Union) to thirty-two States, besides having attached to them eight Territories. The population of the latter is at present too small to allow of their being admitted into the Union as States.

The thirteen States which originally composed the Union were all within the eastern portion of the territory now known as the United States—that is, along the line of the Atlantic coast. These older portions of the Union are distinguished, according to their relative position, as the North-eastern, Middle, and Southern States. The States of later formation, within the Mississippi valley, are known as the Western States. One of the States—California—is to the westward of the Rocky Mountains, and borders on the Pacific.

The **NORTH-EASTERN (or NEW ENGLAND) STATES** are six in number, as follows :—

<i>States.</i>	<i>Towns.</i>
MAINE	Augusta, * Portland.
NEW HAMPSHIRE	Concord, Portsmouth.
VERMONT	Montpelier, Burlington.
MASSACHUSETTS	Boston, Lowell, Springfield.
RHODE ISLAND	Providence, Newport.
CONNECTICUT	Newhaven, Hartford.

Boston, on the coast of Massachusetts, is the largest city of the New England States, and is also one of the most important emporiums of commerce in the Union. The small town of *Plymouth*, to the south-east of Boston (and also in the State of Massachusetts) is sacred in American story as

* The town that is named first in the case of each State ranks politically as its capital, but does not always represent the largest town in the State.

The first of the great cities of the New World is New York. It is situated on the eastern shore of Long Island Sound, at the mouth of the river Hudson, and contains within its limits of jurisdiction the eastern end of Long Island, from which it is divided by a strait of the sea nearly two miles wide of a million inhabitants. Albany is also on the Hudson, 34 miles above its mouth. Buffalo, one of the most thriving of American cities, is at the eastern extremity of Lake Erie, where the river Niagara issues from the west.

THE GREAT LAKES AND THE RIVER SYSTEM

City	State
New York	New York
Albany	New York
Buffalo	New York
Rochester	New York
Syracuse	New York
Watkinsburg	New York
Utica	New York
Oneida	New York
Adirondack	New York
Montreal	Canada

New York is the second city of the United States, and the largest city in the New World. It occupies a commanding position at the mouth of the river Hudson, and contains within its limits of jurisdiction the eastern end of Long Island, from which it is divided by a strait of the sea nearly two miles wide of a million inhabitants. Albany is also on the Hudson, 34 miles above its mouth. Buffalo, one of the most thriving of American cities, is at the eastern extremity of Lake Erie, where the river Niagara issues from the west.

Pennsylvania is the second city of the Union in size and population. It stands at the junction of the rivers Delaware and Schuylkill, about 100 miles above the estuary of the Delaware river. Philadelphia, capital of the Allegheny Mountains (at the junction of the two rivers which unite to form the Ohio river), is within the great coal-field of the United States, and is the seat of extensive iron and other hardware manufactures. Philadelphia ranks third in population among American cities, and has a great maritime trade. It stands on the west side of Chesapeake Bay, at the head of a small inlet.

The District of Columbia is a small tract adjoining the State of Maryland, set apart for the use of the federal government. It contains Washington, the political capital of the United States.

Washington stands on the river Potomac. It is not otherwise important than as the seat of the general government of the Union.

The SOUTHERN STATES are five in number :—

<i>States.</i>	<i>Towns.</i>
VIRGINIA.....	Richmond.
NORTH CAROLINA.....	Raleigh, Wilmington.
SOUTH CAROLINA.....	Columbia, Charleston.
GEORGIA.....	Milledgeville, Savannah.
FLORIDA.....	Tallahassee, St Augustine.

Richmond and *Charleston* are the two largest cities of the Southern States, and the latter of them is the seat of very extensive commerce. *Richmond* stands on James river; *Charleston* at the head of a small inlet on the Atlantic coast. *Charleston* exports a large proportion of the cotton which is grown in the Carolinas and the adjacent State of Georgia—the chief seats of the cotton-crop.

The WESTERN STATES (all, with the exception of Texas, situated within the valley of the Mississippi) are fifteen in number. Nine of them may be classed as North-western, and six as South-western.

The North-western States are—

<i>States.</i>	<i>Towns.</i>	<i>States.</i>	<i>Towns.</i>
MINNESOTA.....	St Paul.	ILLINOIS.....	Springfield, Chicago.
WISCONSIN.....	Madison, Milwaukee.	MICHIGAN.....	Lansing, Detroit.
IOWA.....	Iowa City, Burlington.	OHIO.....	Columbus, Cincinnati.
MISSOURI.....	Jefferson City, St Louis.	KENTUCKY...	Frankfort, Louisville.
INDIANA.....	Indianapolis.		

The South-western States are—

<i>States.</i>	<i>Towns.</i>	<i>States.</i>	<i>Towns.</i>
TENNESSEE.....	Nashville.	LOUISIANA.....	Baton Rouge, New Orleans.
ALABAMA.....	Montgomery, Mobile.	ARKANSAS....	Little Rock.
MISSISSIPPI.....	Jackson, Columbus.	TEXAS.....	Austin, Galveston.

New Orleans, at the mouth of the Mississippi, is largest among the cities of the Western States. Its position renders it the outport for the immense valley of the Mississippi, and hence gives it great commercial importance. But its situation, amongst the swamps of an almost tropical region, is one of the most unhealthy in the world.

Mobile, at the head of an inlet of the Gulf of Mexico, is also the seat of considerable maritime trade.

St Louis, on the Mississippi, *Cincinnati*, on the river Ohio, and *Chicago*, on the south-western shore of Lake Michigan, are among the largest inland cities of the United States. The

last-named of them has grown from a hamlet in the wilderness into a populous city, with marvellous speed.

The only State on the coast of the Pacific is—

Towns.

CALIFORNIA.....Benicia, San Francisco.

San Francisco, the largest city of California, is at the head of a fine bay of the same name, into which the river Sacramento falls. Its rapid growth within a recent period is due to its constituting the outlet for the gold produce of the Sacramento valley.

The Territories of the Union, eight in number, are as follow :—

OREGON—Salem.
WASHINGTON—Olympia.
NEBRASKA.
DAKOTAH.

UTAH—Salt Lake City.
NEW MEXICO—Santa Fé.
KANSAS.
ARIZONA.

The towns in the above are at present of small size. *Salt Lake City* is remarkable as the head seat of the Mormon community. It stands on a small river which flows from the lake of Utah into the Great Salt Lake.

GOVERNMENT, &c.—The United States form a federal republic. Each of the States composing the Union has its own government, while the whole unite in a general government, for the purposes of the Union at large. The general government is administered by a President, who is elected for a term of four years. The legislative power belongs to an elective Congress, consisting of a Senate and a Chamber of Representatives.

There is no established form of worship in the United States. The various forms of Christianity are represented by numerous followers, and the members of each Church support its ministers by their voluntary contributions.

In fifteen of the States which constitute the Union, slavery is an established institution. The names of the slave-holding States are—Delaware, Maryland, Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Tennessee, Kentucky, Missouri, and Texas. These are all within the southern and south-western divisions of the Union.

QUESTIONS ON THE UNITED STATES.

1. Point out upon the map the extent of the United States, and name the boundaries.
2. Name the great natural features of the United States, pointing to them on the map.
3. In what part of the United States territory is the plateau of Utah? What mountain-chain borders this region on the west?
4. Mention some of the principal rivers within the United States. Which among them has the longest course?
5. Which of the great lakes that belong to the basin of the St Lawrence is wholly within the United States? Point it out upon the map.
6. Say what you know concerning the climate of the United States.
7. For what article of natural produce is California noted? Within the valley of what river is this found?
8. In what part of the United States are coal and iron found?
9. From what nation are the great majority of the population of the United States descended? What language uniformly prevails throughout the Union?
10. What other races, besides the European, are included amongst the population of the United States?
11. What constitutes the predominant feature in the industry of the United States? Name some of the chief productions.
12. In which part of the Union is cotton principally grown?
13. In which part is manufacturing industry most prevalent?
14. What forms the distinguishing feature in the commerce of the United States, as to their respective exports and imports?
15. How many States does the Union comprehend at the present time? How many did it embrace when first formed?
16. How are the States that lie along the Atlantic coast divided?
17. Name the six North-eastern (or New England) States.
18. Name the largest among the cities of the New England States, and point to its place upon the map.
19. In which States are the following towns, respectively—Portland, Portsmouth, Providence, and Newhaven?
20. For what is the town of Plymouth noteworthy? In what State is it situated?
21. Name the five Middle States.
22. What city constitutes the commercial metropolis of the United States? At the mouth of what river is it?
23. Point on the map to the following places :—Philadelphia, Baltimore, Buffalo, Pittsburg, New York, and Washington.
24. For what circumstance is Washington noteworthy? On what river does it stand?
25. Name the five Southern States, and point to the place which they occupy (as a whole) upon the map.
26. What two places are largest among the cities of the Southern States? Point them out on the map.
27. How many of the States are comprehended under the name of Western States? Name some of them—as many as you can remember.
28. Which is largest among the cities of the Western States? At the mouth of what river is it?
29. In what States are the following :—St Louis, Cincinnati, and Chicago? Point to each upon the map.
30. Which of the United States borders on the Pacific? What is the name of its largest city?
31. How many territories belong to the Union? Name some of them.
32. Under what kind of government are the United States?

MEXICO.

BOUNDARIES, &c.—Mexico is bounded on the north by the United States, on the west and south by the Pacific, and on the east by the waters of the Mexican Gulf. To the south-eastward it adjoins the narrow region known as Central America.

NATURAL FEATURES, CLIMATE, &c.—Mexico consists of a high plateau, bordered by a narrow strip of low land upon either side. This low plain is generally of greater breadth upon the side of the Gulf of Mexico than upon that of the Pacific Ocean.

From the low coast-plain, the country rises toward the interior by a succession of terraces, one above another, until at length the summit of the table-land is reached. The higher parts of this vary from 6000 to 9000 feet above the sea: the plain on which the city of Mexico stands is upwards of 7000 feet.

The surface of the Mexican plateau is diversified both by continuous chains of high ground and by insulated mountain-peaks, many of which are volcanoes. Amongst the latter, the mountain called Popocatepetl is estimated to reach a greater height than any other in North America. Another well-known peak (towards the eastern border of the table-land) is Orizava, which is not greatly inferior in altitude to the former.

Mexico has no rivers of any considerable magnitude. Some of the streams which water portions of the interior plateau terminate in salt lakes, without reaching the sea.

The climate of Mexico is regulated by the conditions of its physical geography described above. The low plains which stretch along the coast are intensely hot, and are generally unhealthy. The interior plateaus enjoy a moderate temperature, and the various elevations which are passed through in the ascent to them exhibit a progressive diminution of heat. In general, elevations above 2000 feet are free from the unhealthy influences which belong to the damp and heated atmosphere of the coast.

The natural productions are rich and varied, alike in the mineral and the vegetable kingdoms, but they are turned to little account. Gold and silver, with numerous other metallic ores, are extensively distributed. A great many mines are

still worked, but the mineral produce of Mexico in the present day is inconsiderable, compared to its former amount. A rich variety of fruits, medicinal herbs, and other vegetable productions, are native to Mexico. One of the most characteristic is the cochineal-plant, a species of cactus upon which the cochineal-insect (valued for its red dye) thrives. Vanilla, cocoa, and jalapa, are native to Mexico. Tobacco, coffee, indigo, and sugar, are grown: the first-named is indigenous to the soil.

POPULATION AND INDUSTRY.—Mexico has seven and a half millions of inhabitants, more than half of whom belong to the native Indian race. Not more than one million are whites—exclusively of Spanish descent. The remainder are *mestizoes*, that is, of mixed Indian and Spanish blood.

The social condition of the Mexican population is in every respect demoralised, the political state of the country disorganised, and all industrial pursuits are hence at the lowest ebb. Indeed, industry, upon a scale of national importance, can scarcely be said to exist. Some export of precious metals, and, to a limited amount, of cochineal and various produce of the soil, takes place. But the trade has for a considerable time past been declining in amount.

DIVISIONS, &c.—Mexico is nominally a confederation of twenty-two distinct States, with some associated Territories. But the names of the greater number of these are of little importance, and are seldom referred to beyond the limits of the country to which they belong. Few of the towns are of any considerable magnitude.

The city of *Mexico*, which ranks as the head of the Mexican confederation, stands on the interior table-land, nearly midway between the two oceans, and at an elevation of more than 7000 feet above their waters. It was already a seat of empire—the capital of the native Aztec monarchy—when Cortez reduced Mexico under the Spanish arms, in the early part of the sixteenth century.

Vera Cruz and *Acapulco*—the one on the Atlantic coast, the other upon that of the Pacific—are the chief seaports of Mexico. *Vera Cruz* occupies an unhealthy situation upon the low shore of the Gulf of Mexico. *Tampico*, further to the northward, upon the same line of coast, has some share in Mexican commerce, especially in exporting the produce of the mines. *Acapulco*, on the Pacific, possesses one of the finest harbours in the world. *Masatlan*, which is also on

the Pacific (near the entrance of the Gulf of California, upon its eastern side,) has been a rising port within recent years.

Very few among the other cities of Mexico possess any other than local importance. The whole country exhibits a vast decline from its flourishing condition during the sixteenth and seventeenth centuries, when the treasures of the New World were poured into Europe from its shores. But it contains abundant indications of former prosperity, shown in the magnificent architectural decorations of many of its cities, their fine cathedral, convents, and other structures. There are also, in various parts of Mexico, monuments of earlier date, which bear testimony to the partial civilisation attained by the Indians prior to the Spanish conquest. Many of these monuments bear considerable resemblance to the ruins that are so numerous strewn over the plains of Western Asia, and, like them, are gazed on with wonder, not unmixed with awe, by the present degenerate race of natives.

The long and narrow peninsula of California, on the western side of the gulf to which its name is given, forms one of the territories that are attached to the Mexican Confederation. The name of Lower California is now properly given to this region, in order to distinguish it from the gold-producing California, which forms one of the United States.

YUCATAN, also a peninsula, adjoining the opposite extremity of Mexico, forms one of the members of the Mexican Confederation, but has on several occasions assumed the rank of a distinct State. It contains the towns of *Merida* and *Campeachy*, the former of which is the capital.

GOVERNMENT, &c.—The Mexican States form nominally a federal republic, under an elective president, but every kind of political disorder has prevailed for a lengthened time past, and one revolution has succeeded another. Military despotism, alternating with periods of perfect anarchy, has combined with the influences of an oppressive priesthood to destroy the prosperity of this fine country. The Roman Catholic religion is uniformly followed.

CENTRAL AMERICA.

BOUNDARIES, &c.—The name of Central America is given to the narrow tract of country which extends from Mexico to the Isthmus of Panama. This region is bounded by the waters of the Caribbean Sea and the Pacific Ocean on either side, and no part of it is far removed from one or other of the great oceans.

The Bay of Honduras (which is an arm of the Caribbean Sea) washes part of the coast of Central America.

NATURAL FEATURES, &c.—Central America (like Mexico) consists of interior plateaus, with low plains adjoining the coast. The plateaus are inferior in height to those of Mexico, but they are bordered on the western side by high mountains, many of which reach an altitude of 11,000 feet and upwards. Several of these mountains are active volcanoes. The low plain along the Atlantic coast is of considerable extent, especially that part of it which is called the Mosquito coast.

The rivers of Central America are of little importance, excepting in so far as they afford the means of navigation into the interior, and of thereby effecting a nearer approach to communication between the two oceans. The river San Juan, which enters the Caribbean Sea at Greytown, (or San Juan de Nicaragua) has hence become of some note. It issues from the large lake of Nicaragua, the western shores of which approach within eleven miles of the Pacific. Steamers navigate the river and lake, and this route has formed of late years one of the most frequented lines of communication between the countries that lie upon the opposite sides of the American continent. The smaller (but still extensive) lake of Managua, or Leon, lies to the north-west of Lake Nicaragua, and discharges a stream into it.

The climate and natural productions of Central America bear a general resemblance to those of Mexico. The coasts are hot and unhealthy, while the elevated interior is comparatively temperate. The productions of the native forests are of high value.

POPULATION, TOWNS, &c.—Five distinct States are included within Central America. Their names are—Guatemala, Salvador, Honduras, Nicaragua, and Costa Rica. The first named is the largest amongst them. The total population of these

States is below a million and a half. Guatemala alone contains about 600,000 inhabitants.

Three-fourths of the population of the Central American States are either Indians or mestizoes. The whites, who are everywhere the ruling race, are almost uniformly of Spanish descent. Many of the Indians now speak the Spanish language.

The agriculture of these countries is in a backward condition, and the produce of trifling amount, comparatively, to the capabilities which the whole region possesses. This is in great measure the result of political insecurity and frequent revolutionary changes. Indigo, cochineal, coffee (the last chiefly from Costa Rica), with limited quantities of sugar, hides, Nicaragua wood, mahogany, balsam, and sarsaparilla, are the exportable produce.

The chief towns in Central America are as follow :—

States.	Towns.	States.	Towns.
GUATEMALA...	New Guatemala, Old	HONDURAS.....	Comayagua, Truxillo, Omas
	Guatemala, Istapa,	NICARAGUA.....	Leon, Granada,
	St Thomas		Greytown
SALVADOR.....	Salvador	COSTA RICA.....	San José.

The city of *New Guatemala* is of larger size than any other place in Central America. The older city of that name—the former capital of the State—was abandoned as the seat of government from its liability to earthquakes, as well as from the injury to which it is exposed from the eruptions of neighbouring volcanoes. The whole of Central America is more or less liable to earthquakes, which are sometimes of great violence.

Greytown, or *San Juan de Nicaragua*, lies at the southern extremity of the Mosquito Territory, a tract of low and unhealthy coast, the natives of which have claimed to rank as an independent nation. It is a place of considerable trade.

The province of **BRITISH HONDURAS**, or **BELIZE**, is included geographically within Central America. It is a possession of the British crown, attached to the government of Jamaica.

British Honduras has an area of 14,000 square miles, and about 10,000 inhabitants, mostly negroes. Its chief produce is mahogany. The capital of the settlement is the town of *Belize*, at the mouth of a river of the same name.

QUESTIONS ON MEXICO AND CENTRAL AMERICA.

1. Name the boundaries of Mexico, and point them out upon the map.
 2. Give some account of the natural features of Mexico.
 3. What kind of climate has Mexico? In what way is this affected by the characteristic features of its physical formation?
 4. Say what you know concerning the natural productions of Mexico, naming some of its characteristic plants.
 5. To what races does the population of Mexico belong?
 6. What is the general condition of industry in Mexico at the present time? What articles are exported?
 7. Point on the map to the city of Mexico. By what is its site distinguished?
 8. Name the two chief seaports of Mexico, on the Atlantic and Pacific coasts, respectively, and point them out on the map.
 9. Where are the following—Tampico, Mazatlan, Lower California, Yucatan, and Campeachy?
 10. What kind of government is Mexico nominally under? What religion is uniformly followed?
 11. Where is Central America? Point to its limits on the map.
 12. By what seas is Central America bounded on either hand? What bay washes part of its eastern shore?
 13. What are the characteristic natural features of this region?
 14. What two lakes does Central America contain? What river issues from the larger of the two?
 15. How many distinct States are comprehended within Central America? Name them.
 16. Say what you know concerning the population of this region.
 17. What articles are exported from Central America?
 18. Where is the Mosquito Territory? What town lies at its southern extremity, and on what river is it?
 19. Where is British Honduras? What is the name of its chief town?
 20. What article of produce does British Honduras furnish?
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THE WEST INDIES.

SITUATION, &c.—The West Indies are an insular region of large extent, situated amidst the waters of the Atlantic Ocean, and occupying a like place in the western half of the globe to that which the East Indian Archipelago fills in the eastern hemisphere.

The waters of the open Atlantic wash the shores of the West Indian Islands on the eastern side; on the west, are the Gulf of Mexico and the Carribbean Sea.

The numerous islands of this region are embraced under three great divisions—the Greater Antilles, the lesser Antilles (or Windward and Leeward Islands), and the Bahama Islands. The Greater Antilles consist of Cuba, Hayti, Jamaica, and Porto Rico: the Lesser Antilles comprehend the long chain of islands that stretch, in a curved line, from the eastern extremity of Porto Rico to the mainland of South America.

The Bahama Islands are the most northerly portion of the Archipelago.

NATURAL FEATURES, CLIMATE, &c.—All the larger islands of the West Indies are more or less mountainous. So also, with few exceptions, are the islands belonging to the Windward and Leeward chains. The Bahama Islands, on the contrary, are almost wholly level.

In Cuba, the largest island of the West Indies, the mountains reach nearly 8000 feet above the level of the sea, and the mountains in the island of Hayti exceed that altitude. The Blue Mountains of Jamaica are upwards of 7000 feet. Fertile plains and watered valleys alternate with the high grounds. Many of the smaller islands exhibit peaks which rise to 3000 feet, and some even double that altitude.

The climate of the West Indies is thoroughly tropical. With the exception of a part of the Bahama chain, the entire archipelago is within the torrid zone, and exhibits the usual characteristics of that belt of the globe. But the average temperature is not so high as in the correspondent latitudes of the eastern hemisphere. The dry and rainy seasons follow one another with unfailing regularity, and the quantity of rain is excessive—surpassing (in the case of some of the smaller islands) that which is experienced in any other part of the globe. It is only during the rains that the climate is unhealthy.

The most valuable productions of this region are those that belong to the vegetable world. Manioc, arum (or taro*), sweet potato, arrow-root, maize, pine-apple, pimento,† ginger, cocoa, vanilla, the tamarind, guava, cocoa-nut palm, indigo, and tobacco, are indigenous to the soil. The sugar-cane, coffee, cocoa, plantain, and bread-fruit, all flourish.

POPULATION AND INDUSTRY.—The population of the West Indies probably amounts, in the total, to nearly three millions. The Island of Cuba alone has about one million, Hayti about three-quarters of a million, and Jamaica about 400,000. Two-thirds of the population of the whole region are negroes, the remaining third whites and mulattoes, the latter of mixed European and negro blood. The white population is most numerous in Cuba, where it amounts to considerably more than a third of the whole.

* This is a tuberous root, as also is the batata, or sweet potato. The taro furnishes a principal article of food to the inhabitants of the Sandwich Islands, and many other of the Pacific groups.

† Pimento is more familiarly known as *all-spice*.

The chief commercial productions of the West Indies are sugar, rum, molasses, and coffee; with cocoa, tobacco, cotton, spices (chiefly pimento and ginger), to a smaller amount. Three of the above—sugar, rum, and molasses (or treacle)—are the produce of the sugar-cane, the culture of which was introduced into this region by the Spaniards at an early date after the discovery of the New World. Sugar, coffee, and tobacco, are throughout the West Indies the prime objects of industrial regard. In Cuba, which supplies annually an immense quantity of sugar, the culture of these staples of West Indian produce is carried on exclusively by slave-labour.

ISLANDS.—Nearly the whole of the West Indian Islands are in the possession of European nations:—

SPAIN possesses the islands of Cuba and Porto Rico.

GREAT BRITAIN possesses—among the large islands, Jamaica, and among the smaller members of the archipelago, the islands of Trinidad, Tobago, Barbadoes, Grenada, St Vincent, St Lucia, Dominica, Antigua, Barbuda, Montserrat, Nevis, St Christopher, three of the Virgin Islands, and the whole of the Bahamas.

FRANCE possesses Martinique and Guadeloupe, with some smaller dependencies of the latter island, and also a part of the island of St Martin.

HOLLAND possesses part of St Martin, with the islands of Saba, St Eustatius, Curaçao, Oruba, and Buen Ayre—the three last-named situated near the northern shores of South America.

DENMARK possesses Santa Cruz, and two other of the Virgin Islands.

SWEDEN possesses the island of St Bartholomew.

CUBA has an area of 43,000 square miles, which is only one-seventh part less than the size of England. Its capital, *Havannah*, situated on the north side of the island, is the largest city in the West Indies. *Matanzas*, east of Havannah, is the second city on the island. Cuba contains, besides, numerous flourishing towns and ports.

PORTO RICO has an area of 2970 square miles—about half the size of Yorkshire, and a population of half a million, more than half of them whites. Its chief town is *San Juan*.

Of the British possessions in the West Indies, **JAMAICA** is

by much the most important. Its area is 4300 square miles, which is about four-fifths that of Yorkshire. The produce of the island is much less now than formerly, prior to the emancipation of the negroes, but is still considerable. *Kingston*, on the south coast, is the chief seat of the commerce of Jamaica, but *Spanish Town*, in the interior, ranks as the political capital.

Among the smaller islands of the British West Indies, those which extend from Trinidad to St Lucia (inclusive), are called the Windward Islands. The names of their chief towns are given in the following table :—

<i>Islands.</i>	<i>Towns.</i>	<i>Islands.</i>	<i>Towns.</i>
TRINIDAD.....	Port of Spain	GRENADE.....	St George
TORAGO.....	Scarborough	ST VINCENT.....	Kingstown
BARBADOES.....	Bridgetown	ST LUCIA.....	Castries.

Barbadoes is the most important of these islands, and ranks next in value to Jamaica among the British possessions in this region.

The Leeward Islands are those that extend from Dominica to the group of the Virgin Islands, namely :—

<i>Islands.</i>	<i>Towns.</i>	<i>Islands.</i>	<i>Towns.</i>
DOMINICA.....	Roseau	ST CHRISTOPHER.....	Basee-terre
ANTIGUA.....	St John	VIRGIN ISLANDS :—	
BAEBUDA.....		Tortola.....	Road Town
MONTSEERAT.....	Plymouth	Virgin-gorda.....	
NEVIS.....	Charlestown	Anegada.....	

Antigua is the most important and productive island of the Leeward chain.

The BAHAMA ISLANDS include an immense number of islets and rocks, only the larger of which are inhabited. Unlike the other portions of the West Indies, they are low, and are based upon coral reefs. The navigation of the surrounding seas is extremely dangerous. Cattle and salt are their chief articles of produce. The chief town is *Nassau*, which is on the island of New Providence, in the centre of the group.

One of the islands of the Bahama group—probably that called Watling Island—was the first land seen by Columbus in the New World, on the occasion of his memorable voyage of discovery in 1492.

The island of MARTINIQUE lies intermediate between St Lucia and Dominica. Its largest town is St Pierre, but *Fort Royal* ranks as the capital.

GUADALOUPE is north of Dominica. It consists of two portions, divided by a narrow strait. The town of *Basse-terre*, on the more westwardly of these divisions, is the capital.

The islands of Marie-galante and Desirade, to the south-east of Guadeloupe, are dependencies of that island.

The islands of SABA and EUSTATIUS, both of small size, are to the north-west of St Christopher. ST MARTIN, which is divided between the possession of France and Holland, is further to the northward.

CURACAO, off the coast of South America, is the largest of the Dutch islands in the West Indies. Its chief town is *Wallenstadt*. Oruba is to the west, Buen Ayre to the east, of Curaçao.

The largest of the Danish islands is SANTA CRUZ, which is the most considerable of the Virgin Islands. It lies a good way to the south of the other islands of the group. Santa Cruz contains the town of *Christianstadt*.

The two smaller islands belonging to Denmark are St John and St Thomas.

ST BARTHOLOMEW, the only foreign possession of Sweden, is a small island lying south-east of St Martin.

The large island of HAYTI (or ST DOMINGO)—inferior only to Cuba in magnitude—is divided between the government of two Negro (or rather mulatto) States, one of them entitled the Republic of Hayti, and the other the Dominican Republic. The former embraces the western, the latter the eastward, division of the island.

Hayti is naturally one of the finest territories in the world, and was long one of the most productive. But since the closing years of the last century, prior to which time it has been divided between the possession of France and Spain, it has been the frequent theatre of anarchy and bloodshed, and its commercial produce has dwindled to an insignificant amount.

The area of Hayti is about 30,000 square miles—nearly as great as that of Ireland. Its population (between six and seven hundred thousand) is almost wholly of negro and mulatto

westwardly. Cape Froward is the most south point of the mainland, but Cape Horn (which is the southernmost point of an extensive group of islands) is a more celebrated and better known promontory.

ISLANDS.—South America has few islands. Among the chief of them are—the Falkland Islands, and Georgia Island, off the *east* coast; the extensive group called Tierra del Fuego, in the *south*; the islands of the Patagonian Archipelago, Chiloe Island, Juan Fernandez, and the Galapagos Islands, on the *west* side of the continent. Margarita, Curaçao, and a few others, in the Caribbean Sea, which lie near the *north* coast of South America, have been included in the account of the West Indies.*

Tierra del Fuego is divided from the mainland of South America by the Strait of Magellan. It comprehends a vast number of islands, which are intersected by deep and narrow channels.

The islands that lie off the western coast of Patagonia are included under the name of the Patagonian Archipelago. They belong, physically, to the chain of the Andes, and are only divided from the mainland by narrow channels which penetrate the mountain-region.

MOUNTAINS.—South America is traversed by the loftiest and the most continuous system of highlands in the New World—namely, the Andes. Like North America, this continent exhibits the characteristic fact, that its most elevated portions lie along the western side, and it exhibits this in a more eminent degree than is the case in the northerly half of the New World. The Andes lie much nearer to the Pacific coast than the Rocky Mountains do, and leave only a narrow plain between their western base and the sea.

South America has three mountain-systems—the Andes, the Mountains of Guiana, and the Mountains of Brazil. The Andes are much higher than either of the other two.

1. The Andes run in the direction of north and south, through the entire length of South America. They form in some parts two, and in others three, distinct chains, with high plateaus enclosed between. The highest measured summit of the Andes is Aconcagua, on the eastern border of Chili. This mountain very nearly reaches 24,000 feet above the sea, and is higher than any other in the New World. Even this great

* See page 297.

altitude, however, is upwards of 5000 feet beneath that of the culminating peaks of the Himalaya.*

Many other mountains in the vast system of the Andes exceed 20,000 feet in height. A great number of snow-covered summits occur within Bolivia, and enclose between them an elevated table-land. Numerous high summits are also found in the immediate neighbourhood of the equator—amongst them Chimborazo, at one time supposed to be the loftiest mountain on the globe. Towards their southward extremity, the Andes diminish greatly in height, and make much closer approach to the neighbouring ocean. In Patagonia, the mountain-system rises steeply out of the waters of the Pacific. Through their entire course the Andes rise above the line of perpetual snow.

A great number of active volcanoes occur in the Andes—especially on the borders of Chili, and in the neighbourhood of the equator. The highest of them is Cotopaxi, which is less than one degree south of the equator. Earthquakes are of frequent occurrence in most parts of the region which they traverse.

2. The Mountains of Guiana occupy part of the eastern side of the South American continent, to the northward of the equator. Their general direction is east and west. Their highest elevation is estimated at about 10,000 feet, but the general height of the system is probably not more than 4000 or 5000 feet.

3. The Mountains of Brazil comprehend an extensive system of heights, which spread over a large portion of the eastern interior of South America. They consist of numerous chains, some of them lying very near to the coast of the Atlantic, others at a considerable distance inland. Their elevation is very moderate, and the highest summits fall short of 6000 feet.

PLATEAUS.—The South American table-lands are found chiefly within the regions traversed by the Andes, and are enclosed between the double chains which are formed through large portions of that mountain-system. The highest among them is the plateau of Titicaca (within Bolivia and Peru), which contains the large lake of that name, at an elevation of nearly 13,000 feet above the sea. The plain of Quito, which is crossed by the line of the equator, is at an

* See page 147. Mount Everest is 29,000 feet.

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elevation of 9000 feet. There are other portions of the mountain-system in which the enclosed plateaus—bordered on either hand by snowy summits—exhibit similar elevations. These high plains resemble the interior table-lands of the Asiatic continent, but are inferior to them both in altitude and in lateral dimensions.*

LOWLAND-PLAINS.—The whole interior of South America is but of moderate elevation. A series of plains stretch from the shores of the Caribbean Sea southward to the estuary of the La Plata and the mouth of the Rio Negro. These plains separate the Andes from the mountain-systems of Guiana and Brazil. They are naturally divided into three great portions, thus :—

1. The llanos, or grassy plains of the Orinoco valley.
2. The selvas, or forest plains of the Amazon valley.
3. The pampas, or plains of the La Plata region.

The llanos, or savannahs, resemble in general features the prairies of North America. They are vast natural meadows, portions of which are annually overflowed by the rivers.

The selvas exhibit a dense growth of natural forest. The forest-covered tracts are succeeded, to the southward, by grassy plains, which stretch from the upper portion of the basin of the Amazon into that of the Paraguay and other tributaries of the Rio de la Plata.

The pampas are vast plains which, according to the changes of the season, are alternately covered with herbage, or with gigantic thistles. They stretch from the estuary of the La Plata to the base of the Andes.

RIVERS.—Nearly the whole of the South American continent has its slope directed towards the Atlantic, and all its larger rivers consequently discharge into that ocean. The Andes lie so near to the Pacific as to leave no room for the formation of any considerable streams upon their western side.

The chief rivers of South America, named in succession from the northward, are as follow :—

Magdalena.	Corentyn.	La Plata { Uruguay. Parana. Paraguay.
Orinoco.	Surinam.	
Essequibo.	Maroni.	
Demerara.	Amazon.	
Berbice.	San Francisco.	Colorado. Negro.

The river Magdalena flows into the Caribbean Sea, which is

* See page 146.

a gulf of the Atlantic. All of the other rivers that are named in the above list terminate directly in the Atlantic Ocean.

Three of these rivers are greatly superior to the others in magnitude and geographical importance, namely—the Orinoco, the Amazon, and the Rio de la Plata. The Amazon alone drains an area equal to more than a third of the continent, and the three together water nearly three-fifths of its total extent.

The river Orinoco waters the region of the llanos, or grassy plains. It rises in the mountain-system of Guiana, and is joined by numerous tributaries in its circuitous course to the sea. The most remarkable feature of the Orinoco is this: about 100 miles below its source, the river divides into two branches, one of which flows to the south-westward, under the name of the Casiquiare, and joins the river Negro, an affluent of the Amazon. The Orinoco is thus connected, by a natural channel, with the basin of the river Amazon. There is no other instance in the world of the bifurcation of a river of such magnitude, though a few similar examples occur elsewhere among streams on a smaller scale.

The Amazon has its source in the Andes. The branch which rises in the small lake of Lauricocha is regarded as the main stream of the river, but there are other branches of equal or greater length. In all, the Amazon has a length of 3900 miles, so that it rivals the Mississippi. It receives a vast number of tributary streams, the principal of which is the river Madera.

The Amazon and the Mississippi are the two longest rivers on the globe. Either of them surpasses, by several hundred miles, the length of the greatest rivers of the eastern hemisphere, and their waters drain vastly more extensive areas.

The Rio de la Plata * is an immense estuary, formed by the junction of the rivers Parana and Uruguay. The Parana waters a vast area in the eastern interior of the continent, and is joined, 600 miles above the sea, by the river Paraguay, which drains a large portion of the more central plains.

LAKES.—South America has few lakes. The largest is lake Titicaca, lying on the highest plateau of the Andes. It has fresh water, and discharges a considerable river, which flows to the south-eastward and terminates in an extensive marsh.

* That is, River of Silver—so called by its discoverers, under the erroneous impression that the countries which it waters were rich in that ore.

The other lakes lie adjacent to the coast. Among them are Lake Maracaybo, in the north; with Lake Patos and others on the eastern coast, a short distance to the northward of the Rio de la Plata.

CLIMATE AND NATURAL PRODUCTIONS.—South America, as a whole, has a warmer climate than North America. Two-thirds of its extent are within the torrid zone, and hence experience the heating influence of a vertical sun. But the tropical regions of the New World are less intensely heated than those of the African continent, owing to their being less arid than is generally the case with the latter region. The breadth of South America, too, is less considerable than that of Africa, and the extent of solid unbroken land not so great. The higher latitudes of South America, however, are colder than similar latitudes in the northern hemisphere. The quantity of rain which falls in the tropical parts of South America is generally very great—superior in amount to the rain-fall of any other part of the globe. The most striking instances of this are found in certain localities upon the coasts of Guiana and the northerly portions of Brazil. But an extensive region of the western coast, between the foot of the Andes and the Pacific Ocean, within Peru, Bolivia, and part of Chili, exhibits a remarkable exception to this general truth, and is distinguished by extreme aridity.

METALS AND MINERALS.—South America is rich in nearly every description of metallic ore. During a long period subsequent to the Spanish conquest, it supplied more gold and silver than any other region of the globe, and the silver mines of Peru (few of which are now worked) were regarded as inexhaustible.

The whole region traversed by the Andes is capable of yielding both gold and silver, besides ores of copper, iron, lead, and other useful metallic productions. In modern times, Chili is more distinguished by mining industry than most other countries of South America, and its copper ore is of high value. Chili has also coal-fields of some value. Brazil is still famous for its produce of gold, and also of diamonds—the latter is more abundantly found there than in any other part of the world.

VEGETATION.—The remarks made under this head in reference to North America apply to South America also. Maize, cassava (or manioc), cocoa, tobacco, and the potato, are

the characteristic food-plants of the South American continent. The various species of cinchona (or Peruvian bark) are native to the tropical regions of the western coast: their valuable medicinal properties were known to the Indians prior to the first visit of Europeans to the New World.

The caoutchouc (or India-rubber) tree* is a native production of the Brazilian forests, which comprehend a vast number of woods of the most valuable description—among them, mahogany, Brazil-wood, log-wood, and numerous others. The maté-shrub of Paraguay (or yerba-maté) is characteristic of that province, and its leaves are used for a purpose similar to those of the tea-plant in most other parts of the globe.

The combined heat and moisture which distinguish large portions of South America tend to foster luxuriance of vegetation. The forests of Brazil and Guiana—still, over vast regions, almost untrodden by man—surpass in extent and density of growth those of any other region.

ZOOLOGY.—The animals that are native to the warmer latitudes of North America belong, for the most part, to South America also. The puma and the jaguar (or ounce), both of which occur in the wooded regions of Mexico and Central America, are the most formidable of its carnivora. The llama is an animal peculiar to South America. The proper llama, and also the various species known as the alpaca, vicuna, and guanaco, all belong to the high region of the Andes, where they range from Chili nearly to the northwardly extremity of the mountain-system. The llama belongs to the order of ruminating quadrupeds. It is used as a beast of burden.

The tapir is another of the animals peculiar to South America, and is distinguished by the peculiar form of its snout, which bends inwards: it belongs to the order of pachydermata (thick-skinned). The sloth, ant-eater, and armadillo, are natives of South America, and represent in its zoology the order of edentata (toothless animals). The quadrumana (monkeys, &c.) are exceedingly numerous in the forests of Brazil, but are of different species from the like animals in the eastern half of the globe. The opossums, which abound in the forests of South America, and one variety of which is common in the northern half of the New World, belong to the

* The "India-rubber" is a gum which exudes from the bark of the tree, in which incisions are made for the purpose at a particular period of the year.

order of marsupial (pouched) quadrupeds—nowhere else found but in the Australian division of the globe.

Both reptile and insect life are favoured by the combined heat and moisture—with its consequent luxuriance of vegetation—of tropical South America. The boa-constrictor, the largest of the serpent tribe, is found in the swampy plains, and the alligator abounds in most of the rivers within the warmer portions of the continent.

INHABITANTS.—The total population of South America does not exceed twenty millions—a number that is extremely insignificant compared with its vast area and almost unlimited capabilities. About a third of the whole belong to the white race, and are almost exclusively of Spanish or Portuguese origin. With the exception of Brazil, which was colonised by Portugal, nearly all South America was formerly under Spanish rule.

The native Indian race of the New World is more numerous, in the present day, within South America than in North America, and perhaps numbers not less than five millions. The Negro race (chiefly found in Brazil, where they form half the population) includes between three and four millions. Mixed races, or mestizoes—principally of European and Indian blood—make up the remaining number.

EXAMINATION QUESTIONS.

1. By what isthmus is South America joined to North America? What seas wash the opposite shores of this isthmus?
2. How is South America bounded? In what does it terminate to the southward?
3. What gulfs occur on the coasts of South America? What strait is on the south? Point out each of them on the map.
4. Name some of the principal capes of South America. Which is the most northerly point? Which the most southwardly?
5. Point on the map to the following:—the Falkland Islands, Juan Fernandez, Tierra del Fuego, the Patagonian Archipelago, and the Galapagos Islands.
6. Name the principal mountain-system of South America, and point out its range upon the map. Name also its highest summit.
7. What two other mountain-systems belong to South America? Point to them on the map.
8. Comparing the highest mountains in the New World with the highest in the Old World, which exhibit the greatest altitude? Name the highest point in either hemisphere.
9. What table-lands belong to South America?
10. What portions of South America form a vast lowland-plain, and what are its three great divisions?
11. Where is the region of the llanos, and what are its characteristic features?

12. Where are the selvas, and what is their aspect? Within what river-basin do they occur?
 13. Where are the plains of the Pampas? What kind of vegetation characterises them?
 14. Name as many as you can of the rivers of South America, and point to them on the map—beginning in the north-west, and proceeding round the coast.
 15. Which three of the rivers of South America exceed any of the others in magnitude? Point to them on the map.
 16. In what way is the river Orinoco connected with the basin of the Amazon? What is the name of the connecting channel?
 17. What two rivers unite in the estuary of the La Plata?
 18. Name the largest lake in South America, and point it out upon the map.
 19. By what conditions is the climate of South America distinguished?
 20. What parts of South America furnish the precious metals? In which country are diamonds found? In which country is copper extensively produced?
 21. Name some of the more important among the food-plants that are native to South America.
 22. What plants celebrated for their medicinal properties are native to South America?
 23. Mention some other productions of the vegetable world that belong to this region.
 24. Name some of the animals that are most characteristic of the South American continent.
 25. What races of mankind are included among the population of South America? What proportion of the whole are whites?
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COUNTRIES OF SOUTH AMERICA.

BRAZIL.

BOUNDARIES, &c.—Brazil is the largest country of South America. It embraces a vast portion of the eastern shores of that continent, and stretches over nearly half its entire extent.

Brazil is bounded on the north by Venezuela and Guiana; on the north-east and east by the Atlantic Ocean; on the south and south-west by Uruguay, the La Plata territory, and Paraguay; on the west by Peru and Bolivia. Its area exceeds three million square miles.

NATURAL FEATURES, CLIMATE, &c.—The great feature of Brazil consists in its vast plains, which are watered by the largest rivers in the world. Its western boundary nowhere reaches the Andes, and even the highest portions of its surface attain only a moderate elevation above the sea. The mountains of Brazil rarely exceed three thousand feet in height. The greater part of the region over which they stretch forms a moderately-elevated plateau, seldom exceeding a thou-

sand feet above the sea, and traversed by hills of gentle ascent. The range known as the Serra do Mar, which stretches along part of the coast, exhibits a steeper acclivity.

Brazil includes the vastly greater portion of the immense valley of the Amazon, and a small part of the valleys of the Parana and Paraguay. The entire valley of the river San Francisco is within its limits.

The Amazon is the chief river of Brazil. It is throughout navigable by vessels of considerable tonnage, and its stream, at between four and five hundred miles above the sea, has a breadth of several miles, which increases to fifty miles and upwards immediately above its mouth. The Amazon has numerous tributaries, among which the Negro, on its left or northern bank, the Madera, Tapajos, Xingu, and Tocantins, on the right or southern bank, are the most considerable. Every one of these is a large river. Brazil, indeed, abounds in inland waters, and possesses capabilities for inland navigation such as belong to few other regions.

The climate of Brazil is thoroughly tropical. With the exception of the extreme southern provinces, the whole country is within the torrid zone. The diamond and other precious stones, with gold, are among its productions. But the mineral wealth of Brazil is greatly inferior in importance to the vegetable produce of its soil, and to the inexhaustible treasures of its forests.

POPULATION AND INDUSTRY.—The population of Brazil exceeds seven and a half millions, less than a sixth part of whom are whites. These are almost exclusively of Portuguese descent. More than half the total number belong to the Negro race, which in Brazil occupies the common position of the Negro in the New World—that is, they are in a condition of slavery. There are, however, a considerable number of free Negroes, who possess the full privileges of citizens, and are in all respects on terms of equality with the whites. The remainder consists of Indian and mixed races.

Brazil is chiefly an agricultural country. Its soil possesses the highest fertility, and yields the most abundant harvests. Coffee, sugar, and cotton, are its staples of produce, and the first-named has become increasingly important within recent years. Rice, cocoa, maize, and tobacco, with the manioc and other articles of native growth, are also extensively produced. The manioc yields the cassava-bread, the chief article of food to the native Indian population.

Brazil carries on a great foreign trade with Britain. Coffee, cotton, and sugar, with hides, tallow, ornamental woods, and some gold and diamonds, are its articles of export.

TOWNS.—Brazil includes twenty large provinces, the most populous and important of which are those that border on the Atlantic. The regions of the more distant interior are little known, and large portions of them yet remain almost unexplored. The larger towns are all situated on or near the coast.

The capital of Brazil is *Rio Janeiro*, which stands on the western side of a fine bay, one of the most magnificent of natural harbours. *Rio Janeiro* (or *Rio*, as it is often, by abbreviation, called) has nearly half a million inhabitants, and is the largest city in South America. *Bahia*, eight hundred miles to the northward of *Rio*, is the second city in the empire, and is also the seat of a great foreign trade. *Pernambuco* ranks third in importance. This place consists really of several adjoining towns, which have grown into one, and of which that distinguished as *Recife*—the business quarter of *Pernambuco*—is the most considerable. *Pernambuco* is four hundred and fifty miles north of *Bahia*.

The most northerly seaport of Brazil is *Para*, which is situated on a fine estuary called the *Rio do Para*, upon the north-eastern coast. *Para* is by position the great out-port for the Amazon valley—a region of which the vast capabilities are as yet altogether undeveloped.

In the more southwardly division of Brazil, the two chief seats of commerce are the towns of *San Paulo* and *San Pedro*. The first-named lies upwards of two hundred miles to the south-westward of *Rio*, and some miles inland: the maritime town of *Santos* constitutes its port. *San Pedro* (or *Rio Grando do Sul*) is near the southern extremity of the country, at the outlet of the large lake of *Patos*.

GOVERNMENT, &c.—Brazil is the only country in South America which is under a monarchical government. It forms an hereditary empire, with a free constitution, and has advanced rapidly in the path of improvement, both commercial and social, within a recent period.

The Portuguese language is spoken by the population of Brazil. The Roman Catholic religion is followed.

QUESTIONS ON BRAZIL.

1. How is Brazil bounded? What is its area, in square miles?
2. What constitutes the great natural feature of Brazilian geography?
3. Name the principal rivers of Brazil, pointing to them on the map.
4. Among the tributaries of the Amazon, in its course through Brazil, which one joins its left bank? Trace out its course upon the map.
5. Name the chief tributaries of the Amazon on its right or southern bank? Which is longest among them?
6. Say what you know concerning the climate and natural productions of Brazil.
7. What races of people constitute the population of Brazil? What proportion does the Negro race bear to the total number of its population?
8. To what is the industry of the Brazilian population chiefly devoted? Name its three great staples of produce.
9. Name the capital of Brazil, and point to its place on the map.
10. Name, and point out on the map, the places that are second and third in importance among the cities of Brazil.
11. Where are the towns of Para, San Paulo, and San Pedro? Point to each upon the map.
12. Under what form of government is Brazil? What language is spoken by its population? What form of religion prevails?

GUIANA.

BOUNDARIES, &c.—GUIANA is an extensive region in the north-eastern part of South America. It is bounded on the north and north-east by the Atlantic Ocean, on the south by Brazil, on the west by Brazil and Venezuela.

Guiana is now divided into three parts, which belong respectively to Great Britain, Holland, and France, and are hence known as British, Dutch, and French Guiana.

BRITISH GUIANA is the most westwardly of these three divisions. It adjoins Venezuela and Brazil on the west and south, and is divided from Dutch Guiana by the course of the river Corentyn.

DUTCH GUIANA is the middle portion of the whole. It is divided from British Guiana by the river Corentyn, and from French Guiana by the river Maroni. Upon the south, it borders on Brazil.

FRENCH GUIANA is the most eastwardly portion. The river Maroni divides it from Dutch Guiana, and the river Oyapok from Brazil, upon which it borders on the east and south.

British Guiana is the largest of the three divisions; French Guiana the smallest.

NATURAL FEATURES, CLIMATE, &c.—All three divisions of

Guiana are washed by the Atlantic Ocean, along the coasts of which they exhibit a low plain, of great natural fertility. The country rises thence towards the interior, and stretches south as far as the range of the Sierra Acaray.

The numerous rivers of Guiana are the most important among its natural features. The uniform direction of their main streams is from south to north, and they all discharge into the Atlantic.

British Guiana includes the rivers Pomaroon, Essequibo, Demerara, and Berbice: the Corentyn divides it from Dutch Guiana.

Dutch Guiana includes the river Surinam, and has the rivers Corentyn and Maroni on its western and eastern frontiers.

All Guiana has a tropical climate. It is situated, indeed, within the heart of the torrid zone. But the climate, though undoubtedly trying to Europeans, is much less unhealthy than that of most other regions within the tropics. The deadly fevers that prevail upon the African coasts are unknown in South America.

The soil of Guiana is exuberantly fertile, and the natural wealth of its forests is unbounded.

POPULATION, TOWNS, &c.—BRITISH GUIANA has a population of 170,000, five-sixths of whom are Negroes. There are still a few thousand native Indians, whose number undergoes a gradual decrease. The white settlers are chiefly of British origin.

The capital of British Guiana is *Georgetown*, which is situated on the river Demerara, a short distance above its mouth. The only other town of any note is *New Amsterdam*, on the river Berbice.

The commercial produce of British Guiana consists chiefly of sugar and coffee, with cotton, tobacco, and a few other tropical staples, to a less extent. The mouth of the Demerara river is the chief locality of commerce.

DUTCH GUIANA has about 60,000 inhabitants, mostly Negroes. Its chief town is *Paramaribo*, on the river Surinam, the name of which is often applied to the entire province. The commercial productions of Dutch Guiana are chiefly sugar, coffee, and cotton.

FRENCH GUIANA, or Cayenne, has a population stated to

number (including the native Indian race) between three and four hundred thousand. The labours of the field, however, as in other parts of Guiana, are performed by Negroes. The chief town is *Cayenne*, situated on an island which nearly adjoins the coast.

Besides sugar and coffee, pepper, cloves, cinnamon, and nutmegs, are among the commercial productions of French Guiana.

VENEZUELA.

BOUNDARIES, &c.—VENEZUELA embraces part of the northwardly division of South America. It is bounded on the north by the Caribbean Sea, on the east by the Atlantic Ocean and British Guiana, on the south by Brazil and New Granada, and on the west by New Granada. It includes an area of 450,000 square miles, which is nearly four times greater than the whole group of the British Islands.

NATURAL FEATURES, CLIMATE, &c.—Venezuela includes the greater part of the Orinoco valley, with its extensive savannahs, or llanos. These vast grassy plains are succeeded, at intervals, by forest-covered tracts of surprising richness.

The river Orinoco is first in importance among the natural features of Venezuela. It is joined by a great number of tributary streams, several among which rival the larger rivers of most other lands. Above its outlet, the Orinoco forms a delta of vast extent, intersected by numberless channels.

The climate of Venezuela, though hot, is not unhealthy, excepting near the coast, and in some of the low grounds that border on the rivers. The natural wealth of the soil is surprisingly great. The forests abound in the most valuable timber. Cocoa, tobacco, indigo, vanilla, cinchona (or Jesuits' bark), and the cochineal-plant, are among its many valuable productions. Wild horses and oxen roam over its vast interior plains.

POPULATION, TOWNS, &c.—Venezuela has fewer than a million and a half of inhabitants, among whom the mestizoes, or half-caste race (of mixed Spanish and Indian blood), are by much the most numerous. The whites are few in number. The chief articles of commercial produce are sugar, cocoa, coffee, tobacco, and cotton, with hides and cattle. The larger part of the foreign trade is carried on with Britain.

The capital of Venezuela is the city of *Caracas*, which is a few miles distant from the shores of the Caribbean Sea. *La Guayra*, on the coast, forms its port, and has a large amount of foreign trade. *Cumana* and *Barcelona*, both to the eastward of Caracas, are also of some commercial importance. The island of Margarita, to the north of Cumana, belongs to this state.

The only other towns of any note are *Valencia* and *Maracaybo*. *Valencia* is south-west of Caracas, and (like that city) lies a few miles inland: Puerto Cabello is its port. *Maracaybo* is on the west side of the channel which connects the lake of that name with the sea. *Angostura* is the chief place in the valley of the Orinoco.

NEW GRANADA.

BOUNDARIES, &c.—New Granada occupies the north-west corner of the South American continent. It is bounded on the north by the Caribbean Sea, on the east by Venezuela, on the south by Brazil and the republic of Ecuador, and on the west by the Pacific Ocean. Its area is 380,000 square miles.

NATURAL FEATURES, &c.—The great natural features of New Granada are the Andes, the plain along their western base, and the valley of the Magdalena river.

New Granada includes the northerly portion of the Andes, which here form three (and, in one part, four) divergent chains, with elevated plains between. To the westward of the Andes, a low and fertile plain stretches along the coast to the Pacific.

The chief river of New Granada is the Magdalena, which enters the Caribbean Sea. The river Magdalena, and its tributary the Cauca, water the valleys that intervene between the three principal chains of the mountain-system. The river Atrato, which flows into the Gulf of Darien, is to the westward of the Magdalena valley.

The lowland portions of New Granada are covered with a dense forest, and have an intensely hot climate; but the mountain-region is comparatively cool. The mineral wealth of this country is very great, and includes ores of iron, copper, and lead, as well as the precious metals. The agricultural resources are of still higher value.

POPULATION, TOWNS, &c.—The population of New Granada falls little short of two and a half millions. Among them are whites (of Spanish descent), native Indians, a few Negroes, and a vast majority of mixed Indian and Spanish blood.

The commercial produce of the country consists of cocoa, coffee, cinchona (or bark), indigo, tobacco, and cotton, with a small amount of gold and other metals.

The capital of New Granada is *Santa Fé de Bogotá*, which is situated on one of the high plateaus of the Andes, formed by the most eastwardly of the mountain-ranges. *Santa Fé* lies at an elevation of more than 8000 feet above the sea.

The chief seaport of this country is *Cartagena*, on the coast of the Caribbean Sea. *Cartagena* is memorable in English history as the scene of a disgraceful failure in the attempt at its capture by a squadron under Admiral Vernon, in 1741.

The larger part of the ISTHMUS OF PANAMA was formerly included within the State of New Granada. But it has assumed, since 1855, the position of a separate state, the capital of which is the city of *Panama*, situated on the gulf of that name, upon the Pacific side of the isthmus. The traffic across this narrow but important neck of land is maintained by means of the railway which connects the city of Panama with the rising town of *Aspinwall*, or Colon, on the opposite side of the isthmus. A short distance to the eastward of Aspinwall is *Porto Bello*, formerly a place of importance, but now decayed. It was captured by the English squadron under Vernon, in 1740, at the commencement of the Spanish war of that era.

ECUADOR.

BOUNDARIES, &c.—The republic of Ecuador* is bounded on the north by New Granada, on the east by Brazil, on the south by Peru, and on the west by the Pacific Ocean. Its coast-line, which is limited to the Pacific, includes the Gulf of Guayaquil. The Galapagos Islands belong to this state.

The area of Ecuador is 315,000 square miles.

NATURAL FEATURES, &c.—Ecuador includes part of the Andes (which there form two great ranges, with high tablelands between), with the plains that stretch to the east and

* That is, Equator, of which *Ecuador* is the Spanish form.

west of the mountain-region. These plains extend on the one side to the waters of the Pacific, and on the other into the great lowland of the Amazon basin.

The portion of the Andes that falls within Ecuador is one of the most elevated parts of the whole mountain-system. The plain of Quito, directly under the line of the equator, has an elevation of 9000 feet above the sea, and numerous high summits bound it on either hand. Among them are Chimborazo, Cayambe, Antisana, Cotopaxi, and others, several of them active volcanoes.

The river Amazon forms the chief part of the southern boundary of Ecuador, and several of its tributaries flow through the eastwardly division of the state. The two most important among them are the Napo and the Putumayo (or Ica).

The mountain-region of Ecuador enjoys a cool climate, and the city of Quito, though nearly under the line of the equator, has the temperature of an English spring. But the plains of the coast are heated and moist. The natural productions resemble those of New Granada. The cinchonas abound in the extensive forests.

POPULATION, TOWNS, &c.—Ecuador has fewer than three-quarters of a million of inhabitants. These are chiefly mixed races, with some native Indians, and a small proportion of whites (of Spanish descent). The produce of the country is almost exclusively agricultural, and consists principally of cocoa and coffee, with tobacco, hides, and Jesuits' bark.

The capital city of Ecuador is *Quito*, situated on the interior plateau, nearly under the line of the equator. The chief seaport is *Guayaquil*, which stands at the head of the gulf called by its name. None of the other towns are of more than local importance.

GOVERNMENT, &c.—Each of the three countries last described—Venezuela, New Granada, and Ecuador—forms nominally a republic, under an elective presidency. At a former time, when they had first thrown off the supremacy of Spain, the whole three were united into a single republic, under the name of Columbia; but since 1831 they have constituted distinct States. In all three, the white population is Spanish, and the Spanish language is uniformly spoken. The Roman Catholic religion is followed.

QUESTIONS ON GUIANA, VENEZUELA, &C.

1. Where is Guiana? Name its boundaries, and point to them on the map.
2. Into what three portions is Guiana divided? Which is the most eastwardly of the three? Which the most westwardly?
3. Name some of the principal rivers of Guiana, distinguishing the different divisions of the country to which they belong.
4. Say what you know concerning the climate and productions of Guiana.
5. In which portions of Guiana are the following:—Georgetown, New Amsterdam, Paramaribo, and Cayenne? Point to the place of each upon the map.
6. Of what do the commercial productions of British Guiana consist?
7. Where is Venezuela? Name its boundaries, and point them out upon the map.
8. What river constitutes the most important natural feature of Venezuela? What kind of country does its valley embrace?
9. Mention some of the natural productions of Venezuela.
10. What races of people form the population of Venezuela? From what European nation are the whites descended?
11. Name the capital of Venezuela. What place constitutes its port? Point to it on the map.
12. Where are the following places:—Cumana, Barcelona, Maracaybo, and the island of Margarita? Point out each upon the map.
13. Where is New Granada? Name its boundaries, and point them out on the map.
14. What are the great natural features of New Granada?
15. Name the chief river of Venezuela. What tributary has it? Into what sea does this river flow?
16. Say what you know concerning the climate and natural resources of New Granada.
17. What are the commercial productions of New Granada?
18. Name the capital, and also the chief seaport, of New Granada. Point out each upon the map.
19. Where are the following cities:—Panama, Aspinwall, and Porto Bello? Point to the place of each.
20. How is the republic of Ecuador bounded? What islands belong to it?
21. What kind of natural features does Ecuador exhibit? Name some of the mountain-summits that are within its limits.
22. What great river forms part of the southern boundary of Ecuador? What two of its tributary streams are within the State?
23. The climate of a large part of Ecuador, though situated within the heart of the torrid zone, is yet temperate. How is this to be accounted for?
24. Name the chief city, and also the principal seaport, of Ecuador, pointing to each upon the map.
25. Under what forms of government are the three States of Venezuela, New Granada, and Ecuador? What language is spoken? What religion is followed?

PERU.

BOUNDARIES, &C.—Peru is on the western side of South America. It is bounded on the north by the republic of Ecuador, on the east by Brazil and Bolivia, on the south by

Bolivia, and on the west and south-west by the Pacific Ocean. It comprehends an area of 500,000 square miles—about ten times the size of England.

NATURAL FEATURES, &c.—Peru includes, 1. A large portion the Andes—2. A plain along the Pacific coast, between the mountains and the sea—and, 3. A more extensive plain which stretches from the eastern base of the mountains into the interior.

The portions of the Andes which traverse Peru include some of the highest elevations of the mountain-system. Cold and barren table-lands, which rival in elevation the lofty plateaus of Central Asia, are included between the exterior chains, or cordilleras. The table-land of Pasco (between 10° and 11° south latitude) reaches 11,000 feet, and the table-land which contains the lake of Titicaca, further to the southward, is still more elevated.

The coast-plain constitutes, however, the most remarkable feature in the physical geography of Peru. It is almost throughout an arid and sandy region, in which the only verdure is found on the immediate banks of the numerous short streams by which it is traversed.

Peru includes the upper portion of the great river Amazon, and the chief tributaries by which it is joined, either within the mountain-region, or shortly after its issue from the mountains.

The climate of Peru varies with the striking differences in its physical conformation. The mountain-region is cold. The coast-plain is intensely hot, and arid as the *tehama* of the Arabian peninsula*—a tract which it resembles in many respects. Rain is almost unknown here, and the dense mists which are of periodical recurrence are the only source of moisture. The plains to the east of the mountains are watered by abundant rains.

POPULATION, &c.—The population of Peru exceeds two millions. The vast majority are Indians and mixed races. The whites are of Spanish descent.

Peru has great mineral wealth, and still greater agricultural resources. Its mines of gold, silver, and quicksilver, long the richest in the world, are now only worked to a limited extent. Nitrate of soda is extensively obtained in the neighbourhood of Iquique, towards the southward extremity of the coast-plain. All the rich productions of the South American

* See page 171.

forest—gums, balsams, cinchona-bark, vanilla, sarsaparilla, and the caoutchouc-tree—abound in Peru, and the food-plants of Europe thrive at various elevations among the mountain-region. The guano procured from the little group of the Chincha Islands (S. lat. $13^{\circ} 40'$) has for many years constituted one of the chief items of the Peruvian export-trade.

Towns.—The capital of Peru is the city of *Lima*, which is six miles distant from the coast of the Pacific. Lima was founded (A.D. 1535) by Pizarro, whose remains lie within its magnificent cathedral. *Callao*, on the adjacent coast, is the port of Lima, and the chief commercial outpost of Peru.

Cuzco, Arequipa, and Pasco, are among the most considerable inland cities of Peru; Payta, Huanchaco, and Arica, are (with Callao) among its chief seaports. *Cuzco* is a city of early Indian origin, the former capital of the Incas, or native sovereigns of Peru. It stands in a valley which is elevated more than 11,000 feet above the sea.

BOLIVIA.

BOUNDARIES, &c.—Bolivia is bounded on the north by Peru, on the north-east and east by Brazil, on the south by La Plata, and on the west chiefly by Peru. A very small portion only of its western frontier touches the Pacific Ocean. The area of Bolivia is somewhat less than that of Peru.

NATURAL FEATURES.—Some of the highest portions of the Andes are within Bolivia. The border-line between Peru and Bolivia crosses the high table-land of Titicaca, the larger portion of which is within the latter state. Upon either side of the table-land are ranged some of the highest summits of the mountain-system. One of the number—the peak of Lirima—has been conjectured to surpass in height even Aconcagua, which is generally regarded as the culminating summit of the western world.

To the east of the Bolivian Andes, vast plains stretch towards the interior of the continent; the country along their western base is an arid wilderness. Only a small portion of the latter tract, however, is within Bolivia.

The eastward division of Bolivia is watered by numerous rivers, some of which belong to the basin of the Amazon, others to that of the Paraguay. Lake Titicaca is partly

within Bolivia, and partly in Peru. The basin of this lake is entirely inland: a stream which issues from it is lost in the salt lake of Uros, to the south-eastward.

The climate and productions of Bolivia resemble those of Peru. Like that country, it abounds naturally both in mineral and vegetable wealth.

POPULATION, &c.—The population of Bolivia is estimated at more than two millions, chiefly composed of Indians and mixed races. The whites, as is the case along the whole western side of the South American continent, are Spanish. The precious metals, with bark, and the wool of the alpaca and other animals of the llama tribe, are among the chief commercial productions of Bolivia. Coffee, cocoa, tobacco, sugar, and maize, are the common objects of culture.

TOWNS.—The chief town of Bolivia is *Chuquisaca*, which stands on the table-land of the interior, at an elevation of more than 9000 feet above the sea. *Potosi*, to the south-west of the capital, is a more famous city, on account of the rich silver-mines with which its name was so long associated; but these are now for the most part abandoned.

The town of *La Paz*, which stands only a short distance from the lake of Titicaca, is more populous and commercial than any other place in Bolivia, and the chief transit-trade of the republic passes through it. The only seaport of Bolivia is *Cobija*, a wretched place, situated on an arid line of coast.

GOVERNMENT, &c.—Both Peru and Bolivia are nominally republics, the supreme executive authority in each being confided to an elective president. In reality, in the case of these and other South American States, the government has become a military despotism. In both countries, the religion uniformly followed is that of the Roman Catholic Church.

QUESTIONS ON PERU AND BOLIVIA.

1. On which side of South America—east or west—is Peru? Point out its boundaries on the map.
2. What three natural divisions does the physical geography of Peru include?
3. What kind of region is the coast-plain of Peru?

4. What great river has its upper portion within the mountain-region of Peru?
5. Say what you know concerning the climate of Peru.
6. What mineral productions are found within Peru? What productions of the vegetable world?
7. From what group of islands, on the coast of Peru, is guano obtained? Point them out upon the map.
8. Name the chief city of Peru, and point to it on the map. What place forms its port?
9. Find out the following places on the map:—Cuzco, Arequipa, Pasco, and Iquique.
10. By what circumstance is Cuzco historically distinguished?
11. Point to Bolivia on the map, and name its boundaries.
12. What great lake is on the borders of Bolivia and Peru? Point to it on the map.
13. What kind of country is to the west of the Bolivian Andes? What to the east?
14. Mention some of the commercial productions of Bolivia.
15. Point out the following places on the map:—Chuquisaca, Potosí, and La Paz. Which of them is the capital of Bolivia?
16. What seaport does Bolivia possess? Point it out upon the map.
17. Under what form of government are Peru and Bolivia? What religion is followed?

CHILI.

BOUNDARIES, &c.—Chili is a narrow strip of country upon the western sea-board of South America, between the Andes and the Pacific Ocean. On the north it is bounded by Bolivia, on the east by La Plata, on the west (and also on the south) by the Pacific Ocean. Though of such narrow limits in the direction of east and west, the area of Chili is not less than 170,000 square miles, which is more than twice the size of Great Britain.

NATURAL FEATURES.—The stupendous cordillera which forms its eastern boundary is the great feature of Chili. The Chilean Andes include the highest measured summit of the mountain-system—the peak of Aconcagua. Numerous other high summits, many of them volcanoes, occur both to the north and south of this peak.

The plain between the Andes and the ocean is much broader within Chili than upon other parts of the South American coast. This plain is not uniformly level, but for the most part diversified by hills of moderate altitude, with watered valleys between. Towards the extreme north, however, it passes into a perfectly arid region, called the Desert of Atacamá, the greater part of which is within Chili. This is a perfectly sterile wilderness, devoid of rain, and entirely destitute of verdure.

Chili contains numerous rivers, which uniformly have their courses to the westward, flowing from the Andes into the Pacific Ocean. The longest of them is the Biobio.

The climate of Chili is temperate and healthy, becoming gradually cooler towards the south. Among its mineral productions are copper and coal, both of which are worked—the former to a considerable extent.

POPULATION, TOWNS, &c.—The population of Chili is little short of a million and a-half. It includes a larger proportion of the white race (Spanish) than is the case in other countries of South America.

The commercial produce of the country is derived partly from the mines, and partly by agricultural labour. Oxen are reared in vast numbers, and their hides exported. The commercial intercourse maintained with Europe is greater than is the case with any other country on the western side of South America. Chili exports copper-ore, a small quantity of silver, hides, wheat, flour, and jerked beef.

The capital of Chili is *Santiago*, an inland city, about midway between the Andes and the ocean. The chief seaport is *Valparaiso*, which is the most extensive mart of commerce upon the west coast of South America. The city of *Concepcion*, on the river Biobio, to the southward of Valparaiso, is also of considerable commercial importance.

On the coast to the northward of Valparaiso there are numerous ports, amongst which *Coquimbo* is the most important.

GOVERNMENT, &c.—Chili (like all the other States of Spanish America) is a republic, under an elective president. The Roman Catholic religion is uniformly followed.

LA PLATA, OR THE ARGENTINE CONFEDERATION.

BOUNDARIES, &c.—La Plata embraces a confederacy of States, which are together entitled the Argentine Republic, or the United Provinces of La Plata. The territory which they include is bounded on the north by Bolivia, on the west by Chili, on the south by Patagonia, and on the east by Paraguay, Brazil, Uruguay, and Buenos Ayres.

NATURAL FEATURES, &c.—The greater part of the La Plata territory is an immense plain. This plain includes, in the

south, the region of the Pampas, and, in the north, the larger portion of an extensive tract called the Gran Chaco—a succession of grassy plains, of the highest natural fertility, though tenanted only by wild beasts, or equally wild Indians.

The rivers of La Plata are of first-rate magnitude. Among them are the Paraguay, the Parana, and the Uruguay, the three great feeders of the extensive estuary entitled the river Plate (Rio de la Plata). The whole region, with the exception of a very small tract in the extreme north, is within the temperate zone, and the climate is not generally warmer than that of southern Europe.

POPULATION, &c.—This territory is very thinly populated. Its inhabitants number fewer than a million. A larger proportion are of white race than is the case in the countries further north. The whites are chiefly, but by no means exclusively, of Spanish descent.

The vast herds of oxen and horses constitute the wealth of La Plata. The articles that form its commercial exports are horse and ox hides, horse-hair, horns, wool, tallow, dried beef, and furs, together with small quantities of mineral produce, (chiefly gold, silver, and copper).

TOWNS.—The town of *Parana*, a place of small size, and otherwise unimportant, is the present capital of the Argentine Confederation. It stands on the left bank of the river Parana, 250 miles above the estuary of the Plate.

The other towns within the Argentine Confederation are of small size, and of little importance.

GOVERNMENT.—The number of provinces now included within the Argentine Confederation is reduced to twelve. Each of these is a distinct republic, the whole constituting together a federal union. When first these provinces declared their independence of Spain, in the early part of the present century, they were fifteen in number. But three amongst them have subsequently become separated from the federal body, and assumed the position of independent States. These three are Paraguay, Uruguay, and Buenos Ayres.

The Spanish language prevails throughout the territory of La Plata. The Roman Catholic religion is uniformly followed.

PARAGUAY is to the north-east of the Argentine Republic. It is enclosed between the great rivers Parana and Paraguay.

upon either hand, and is bounded on the north and east by Brazil.

Paraguay includes an area of 80,000 square miles, and a population of more than half-a-million. Its most characteristic article of produce is the yerba-maté, or Paraguay tea, which is extensively used in South America for a purpose similar to the proper tea-plant of the Old World. The chief town of Paraguay is *Assumption*, on the river Paraguay.

URUGUAY is the south-eastern portion of the La Plata territory. The river Uruguay forms its western border. On the south it is bounded by the Rio de la Plata, on the east by the Atlantic Ocean, and on the north by Brazil.

Uruguay includes 75,000 square miles, and has fewer than two hundred thousand inhabitants. Its capital is *Monte Video*, which stands on the north bank of the Rio de la Plata, at the entrance of that estuary. Monte Video occupies a position admirably suited for maritime commerce, of which it formerly enjoyed a large share. But long-continued warfare between Uruguay and the neighbouring state of Buenos Ayres materially injured its trade, which is now, however, reviving.

BUENOS AYRES was formerly the head of the Argentine Confederation, but separated itself from the Union in 1853. The State which bears its name is the south-eastern division of the La Plata territory. It includes the southern bank of the Rio de la Plata, and extends thence along the Atlantic coast as far as the river Negro, on the border of Patagonia.

The whole territory of Buenos Ayres is stated to have a population of 350,000. The city of that name perhaps includes about a third of the number.

Buenos Ayres is the most commercial city in this portion of South America, and, though no longer a member of the Argentine Confederacy, still constitutes the chief out-port for the produce of the La Plata territory. It stands on the south bank of the Rio de la Plata, or river Plate, towards the upper portion of the estuary.

The extreme southern portion of the American continent is called PATAGONIA—an extensive and comparatively barren

tract of country which stretches southward from the river Negro to the Strait of Magellan. A few uncivilised Indians are the sole inhabitants of this region. The sovereignty over Patagonia is claimed by the Argentine Confederation. The narrow tract of country at the western base of the Patagonian Andes belongs nominally to Chili.

The FALKLAND ISLANDS are a possession of the British Crown. They consist of two principal islands (East and West Falkland), which are divided by a narrow strait.

These islands are situated in the midst of a stormy sea, and are capable of yielding little beyond oxen and horses, great numbers of which are found there, in a wild state. The climate is not sufficiently genial for any considerable amount of agricultural produce. Whaling ships, and other vessels passing round Cape Horn, occasionally visit the port of *Stanley*, situated on the coast of East Falkland.

QUESTIONS ON CHILI AND LA PLATA.

1. How is Chili bounded, on the east, west, and north?
2. Give some account of the natural features of Chili.
3. Where is the tract called the Desert of Atacamá? Point it out upon the map.
4. What productions of the mineral kingdom belong to Chili? What articles constitute its commercial produce?
5. Name the capital of Chili. Also its chief seaport.
6. Where are Concepcion and Coquimbo? Point them out upon the map.
7. Under what form of government is Chili? What language is spoken there? What religion is followed?
8. Where is the La Plata territory? How is it bounded?
9. Where is the tract of country known as the Gran Chaco? What natural features does it exhibit?
10. What three great rivers belong to La Plata? Into what estuary are their waters discharged?
11. In what does the wealth of La Plata chiefly consist?
12. What articles constitute the commercial produce of this region?
13. What town forms the present capital of the Argentine Confederation? On what river is it?
14. How many provinces are at present included within the Argentine Confederation? What three States, now independent, were formerly members of it?
15. Where is Paraguay? What two great rivers bound it on either side?
16. Name the capitals of Paraguay and Uruguay respectively. Point to them on the map.
17. What characteristic article of natural produce does Paraguay furnish?
18. Where is Buenos Ayres? Point to its place upon the map.
19. Where is Patagonia? By whom is the sovereignty over it claimed?
20. To whom do the Falkland Islands belong? What town do they contain?

AUSTRALIA.

SITUATION, BOUNDARIES, &c.—AUSTRALIA is within the southern hemisphere. It is the smallest of the continents, and is the only one of them that is situated wholly to the south of the equator.

Australia is bounded by the ocean on every side—by the Pacific Ocean on the east, the Indian Ocean on the west and north-west, by the Southern Ocean on the south. It is therefore an insular continent.

In point of size, Australia is not greatly inferior to Europe. It includes an area of 3,000,000 square miles, which is more than three-fourths the size of Europe.

SEAS, GULFS, &c.—Australia is much more solid and unbroken in external contour than Europe—more so, indeed, than any of the other continents, excepting Africa and South America. The indentations which penetrate its coast-line do not affect in any way the general solidity of the whole mass of land.

The most considerable arms of the sea on the Australian coasts are—on the north, the Gulf of Carpentaria; on the south, St Vincent Gulf and Spencer Gulf; on the west, Shark Bay.

The two principal straits are—Torres Strait, in the north, and Bass Strait, in the south. Torres Strait divides Australia from New Guinea. Bass Strait intervenes between the Australian mainland and the neighbouring island of Tasmania.

CAVES.—The most important are—Cape York, which is the

extreme north point of Australia; Cape Byron, the most easterly point; Cape Howe, in the south-east; Cape Wilson, the southernmost point; Cape Leeuwin, in the south-west; and Steep Point, the westernmost extremity.

NATURAL FEATURES.—Australia exhibits tracts of high ground in the neighbourhood of the coast, and vast plains, of trifling elevation, towards the interior. The high grounds are most connected, and of the most considerable altitude, upon the eastern side of the continent, where they form a continuous cordillera, or chain of heights, stretching along the shores of the Pacific Ocean, at a distance of fifty or sixty miles inland. One portion of this prolonged range of high ground is known as the Australian Alps, another portion bears the name of the Blue Mountains, and a third is entitled the Liverpool Range.

The Australian Alps are in the extreme south-east of the continent, partly within the province of Victoria, and partly within the neighbouring province of New South Wales. They reach upwards of six thousand feet in height, which is a greater altitude than that of any other mountains in Australia. At this moderate elevation, the Australian Alps are covered with perpetual snow. Mount Kosciusko, one of the highest summits, is six thousand five hundred feet.

The Blue Mountains are to the northward of the Australian Alps, and within the province of New South Wales. They seldom exceed three thousand feet. The Liverpool Range is still further north. The high grounds continue in the same direction towards the neighbourhood of Moreton Bay, and probably still further to the northward.

South Australia, which includes St Vincent and Spencer Gulfs, contains some ranges of high ground in the neighbourhood of those inlets. These have the same general direction of north and south as the cordillera of the eastern coasts. Few of the mountains of South Australia exceed three thousand feet.

The western coasts of the Australian continent are backed by high grounds of moderate elevation, seldom exceeding two thousand feet. Part of these bear the name of the Darling Range. There are similar tracts of high ground in the neighbourhood of many parts of the north-western and northern coasts, but they nowhere exhibit the character of mountain-chains.

From the inland base of the coast-range, the country spreads

out in vast plains towards the distant interior of the Australian continent. In many parts these plains exhibit almost perfect uniformity of level, so complete as to afford no outfall to the rivers. But this is not always the case: elsewhere the country is more diversified, and tracts of undulating ground, in many cases grassy and watered, are of frequent occurrence at considerable distances inland.

An immense portion of interior Australia is yet unexplored, but the central regions of the continent are probably, on the whole, desert. It appears likely that the more distant interior of Australia consists of plains which are little elevated above the sea, and of which the prevailing character is aridity. At the furthest point which has hitherto been reached (about midway between the head of Spencer Gulf and the southern shore of the Gulf of Carpentaria), the explorers found a perfectly arid wilderness, devoid alike of water and of vegetation, and the surface of the ground diversified only by shifting sand-hills.

RIVERS.—Australia has no rivers which can compare with the rivers of other continents in volume of water, and consequent capability of navigation. Yet large portions of it are at least moderately watered, in sufficient measure to furnish the needful amount of irrigation to the soil, and its longer streams have been recently proved capable of ascent by steamers of light draught for considerable distances inland, during their season of flood.

The most considerable river of Australia is the Murray, which rises in the Australian Alps, and flows into the Southern Ocean at Encounter Bay. The Murray is 1200 miles long, and waters an area of 200,000 square miles. Within this extensive river-basin are included the courses of the Murrumbidgee, Lachlan, and Darling, which are tributaries of the Murray.

There are numerous short rivers on the eastern side of Australia, between the coast-chain of mountains and the ocean. Among the principal of them (beginning at Moreton Bay and proceeding southward) are the Brisbane, Clarence, Macleay, Hunter, Hawkesbury, and Shoalhaven.

The rivers on the western side of the continent are inferior to those on its eastern coasts. The most important among them is the Swan River.

Upon the northern coasts of the Australian continent there are also numerous streams; but none of them come from any

great distance inland, and their supply of water is chiefly dependent on the periodical rains. The Victoria River, on the north-western coast, is one of the most considerable.

The chief characteristic of the rivers of Australia is their liability to sudden and violent floods. They are for the most part mere surface-torrents, supplied by the rains. During seasons of drought they become speedily dried up, under the intense heat of an Australian sun, or the stream is converted into a chain of ponds. With the recurrence of the rainy season, vast floods of water are poured through their beds, and huge trunks of trees, masses of rock, and other *débris*, hurried down by the stream, bear witness to the violence of the torrent. The Murray and its chief tributaries are perennial streams, but their volume of water undergoes great variation, according to the season of drought or rain.

Lake Alexandrina, through which the Murray passes immediately above its mouth, is the largest lake in Australia. It is a shallow expanse of water, difficult to navigate. The other lakes that are sometimes marked on the maps of Australia are only salt marshes, or mere surface-ponds, with dry beds during the larger portion of the year.

CLIMATE AND NATURAL PRODUCTIONS.—The prevailing characteristic of the Australian climate is intense aridity. The air of Australia is almost uniformly warm, dry, and healthy. In many districts, however, especially at a distance from the coast, the temperature undergoes frequent and sudden changes.

Nearly one-half of Australia falls within the torrid zone. Even its highest latitudes are not more distant from the equator than the shores of Spain, southern Italy, Greece, and Asia Minor, upon the opposite side of the globe. The whole of Australia, therefore, experiences a high temperature, but, from its situation in the southern hemisphere, the amount of heat diminishes from north to south, instead of (as in the case of the northern continents) from south to north. The southernmost parts of Australia are the coolest, and the heat increases with every successive parallel in a northwardly direction.

The most populated portions of the Australian continent—that is, the settled districts of Victoria, New South Wales, South Australia, and Western Australia—have a climate which bears much resemblance, in so far as temperature is con-

cerned, to that of the extreme south of Europe. Moreton Bay (or Queensland), which is nearer the tropic of Capricorn, is of course hotter, and the northern coasts, which are within the torrid zone, are hotter still. Intensely hot winds, generated in the arid desert of the interior, are sometimes felt within the coast-districts, and produce effects which, for a brief season, resemble those that result from the simoom of the African wilderness.

The rains in Australia fall with great violence at particular seasons, which (within the settled districts) are coincident with the winter of the southern hemisphere—that is, May to August. During nine months of the year rain seldom occurs.

METALS AND MINERALS.—Australia has been proved, within recent years, to abound in mineral resources. The gold-fields of Victoria rival those of California in abundance of produce, and the copper-ore of South Australia is of unsurpassed richness.

Gold is found in Australia along the inland base of the Australian Alps, and at various localities within the basin of the upper Murray and its tributary streams, as well as in other parts of the province of Victoria. Some of the gold-fields are within New South Wales, but those of Victoria are of far greater value.

Other metals—iron, copper, lead, and tin—occur in the settled portions of Australia. Coal is only found within New South Wales (at the mouth of the river Hunter), and in the neighbouring island of Tasmania.

VEGETATION.—The native vegetation of Australia is altogether different from that of other parts of the globe. Australia is the only one of the continents that has no characteristic food-plants of its own—neither grains, fruits, nor esculent roots of any value. With scarcely an exception, the plants that are indigenous to its soil are valueless as food. Many of its trees, however, yield valuable timber: they belong chiefly to the orders known as gum-trees (*eucalypti*) and acacias.

All the grains and fruits that belong to southern Europe and similar regions of sub-tropical temperature flourish, however, in the Australian soil. The vine, orange, fig, olive, peach, and numberless fruits of like description, grow in unsurpassed luxuriance. Both wheat and maize return abundant crops.

ZOOLOGY.—The native animals of Australia present no analogy to those of other regions. The largest of its mammalia is the kangaroo, which belongs to an order (the *marsupial*) that is scarcely represented elsewhere.* Two-thirds of the native animals of Australia are either kangaroos or opossums. There are numerous varieties of the kangaroo, differing greatly in size from one another. The most formidable among the carnivorous animals of Australia is the native dog, or dingo, which is fast diminishing in numbers, and will probably soon become extinct.

The animals native to Australia, like the plants indigenous to that region, are of no obvious service to man. At least, they include none which can supply the same uses to man as the domesticated cattle of other regions—no oxen, sheep, goat, horse, deer, camel, or elephant. All the domestic quadrupeds of Europe, however, have been introduced into Australia. Sheep and oxen are now reared there in almost countless numbers. Herds of wild oxen, descended from strayed members of the settlers' stock, are occasionally met with in the distant interior.

The native birds of Australia, and indeed all the members of the animal world, are unlike those of other lands. The emu (or Australian ostrich) is found within the arid plains of the interior. Snakes and other members of the reptile kind are not generally numerous, nor is the general aridity of the Australian soil favourable to their development. They are more numerous within or near the tropical portions of the continent than in the settled provinces of the south and south-east.

POPULATION.—The chief part of the present inhabitants of Australia are of British descent. The colonisation of this distant region by Great Britain commenced less than three-quarters of a century since (in 1788), and has progressed with greatly-accelerated speed since the discovery of its rich gold-fields, in 1851. There are now upwards of a million British subjects in the settled provinces of Australia, speaking the English language, and following the ordinary usages, in all

* The distinguishing characteristic of this tribe of animals is the pouch under the neck, in which they carry their young. Opossums are found in America (see page 305). With this exception, the *marsupial* order of animals is confined to the Australian continent and the adjacent island of Tasmania. The kangaroo is found nowhere else.

essential respects, of the Anglo-Saxon race. A few settlers from other European lands, chiefly Germans, are intermingled with the British population.

The aboriginal natives of Australia are among the most degraded members of the human race. They are few in number, and are rapidly diminishing. They are now, indeed, seldom seen in the neighbourhood of the towns. The scattered tribes that wander over the vast interior obtain a scanty subsistence from such means as the forests or river-beds of their native land affords. A few roots and berries, with shell-fish, insects, grubs, and other objects repulsive to civilised tastes, are the sole native resources of the Australian savage in this respect.

The aborigines of Australia belong to what ethnologists distinguish as the Papuan (or Austral-Negro) race. Their skins are of dark colour—almost black, and their stature below the average of Europeans.

QUESTIONS ON AUSTRALIA.

1. In what particular, as to situation, is Australia distinguished from each of the other continents?
2. By what oceans is Australia bounded on the east and west? By what on the south?
3. Of what size is Australia as compared with Europe? State its area, in square miles.
4. Name the four principal inlets of the Australian coasts. Which two of them are on the south? Point them out on the map.
5. What two straits belong to Australia? Point to them on the map, and name the lands from which they divide the Australian continent.
6. Name the principal capes of Australia, pointing to each upon the map.
7. Which portion of the coasts of Australia exhibits the most continuous chain of high grounds? How are the different parts of this cordillera named?
8. Point on the map to the Australian Alps. What height do they reach?
9. In what other parts of the Australian continent (besides the eastern coasts) do ranges of high ground occur? Point to the localities on the map.
10. What is the general character of the interior regions of the Australian continent, so far as they are yet known?
11. Name the most considerable among the rivers of Australia, and trace out its course upon the map. In what mountains does it rise?
12. Name some of the rivers on the eastern coast of Australia, and point to them on the map.
13. Name the principal river on the west coast of Australia. Also, the principal stream on the north-western coast.
14. What is the chief characteristic of the Australian rivers?
15. Name the largest lake of Australia, and point it out upon the map.
16. What is the prevailing characteristic of the climate of Australia? With what countries of Europe may the settled portions of Australia be compared, in regard to temperature?

17. Say what you know concerning the mineral productions of Australia. In which parts of it is gold found? In which copper? In which coal?
18. Give some particulars concerning the native vegetation of the Australian continent.
19. To what order of mammalia do the greater number of the animals of Australia belong? In what other part of the world are members of this order found?
20. Name some of the quadrupeds, among the domesticated animals of other regions, that are absent from the native zoology of Australia.
21. To what race and nation does the chief part of the present population of Australia belong?
22. Say what you know concerning the native population of this division of the globe.

THE AUSTRALIAN COLONIES.

The settled portions of Australia constitute six colonies, each of them under the rule of a governor appointed by the British crown. Five of these colonies are on the Australian mainland—namely, New South Wales, Queensland, Victoria, South Australia, and Western Australia. One of them—Tasmania—consists of the island of that name. The governor of New South Wales—the earliest settled of the colonies—ranks as Governor-General of the entire group.

1. **NEW SOUTH WALES** occupies part of the east coast of Australia, and stretches inland for a distance of nearly six hundred miles. It includes an area of two hundred and fifty thousand square miles, and has a population which exceeds three hundred thousand.

The Blue Mountains, the Liverpool Range, and the northerly portion of the Australian Alps, fall within New South Wales. The rivers Shoalhaven, Hawkesbury, Hunter, Macleay, and Clarence, belong to its seaward division. The Macquarie river, together with the Murrumbidgee, Lachlan, Darling, and other tributaries of the Murray, water its inland plains. The river Murray divides New South Wales from Victoria.

The chief produce of New South Wales is wool, which is exported to England. Vast flocks of sheep, and also numerous cattle, are reared on the pasture-grounds of the interior. Sheep and cattle-farming are the prime pursuit of the Australian settlers' life.

The gold-fields of New South Wales yield a much less return than those of the neighbouring colony, but it was in this province, within the valley of the Macquarie river, that gold was first found in Australia, in 1851.

Norfolk Island, situated nine hundred miles to the eastward of the Australian continent, is attached to the government of New South Wales.

2. QUEENSLAND is to the northward of New South Wales. It extends along a part of the eastern coast of Australia, and includes Moreton Bay. The Brisbane, which falls into Moreton Bay, is its principal river along the side of the coast: in the interior, it includes several of the tributaries of the river Darling, belonging to the basin of the Murray.

Queensland—then known as the Moreton Bay District—formed part of New South Wales prior to the year 1858, when it was formed into a distinct colony.

3. VICTORIA is divided from New South Wales by the river Murray. It is bounded by New South Wales on the north and north-east, and by South Australia on its western side. On the south and south-east, it has the channel of Bass Strait and the adjoining ocean. Victoria has an area of nearly a hundred thousand square miles, and a population little short of half-a-million.

Victoria was made a distinct colony in 1850. It had previously formed part of New South Wales, and was known as the Port Phillip District—from the harbour of that name, on its southern coast-line. Melbourne, its chief city, was not founded until 1837. Though of so recent an origin, Victoria is the most populous, and is commercially the most important, of the Australian colonies. This is owing to the unsurpassed richness of its gold-fields, which have rapidly attracted population thither.

4. SOUTH AUSTRALIA is to the westward of New South Wales and Victoria. It comprehends part of the southern coast-line of the Australian continent, including Spencer and St Vincent Gulfs. Lake Alexandrina and the outlet of the Murray are within this province.

The colony of South Australia was established in 1836. The larger portion of its area is as yet unoccupied, and even unexplored. The population is upwards of 110,000. This province has more of agricultural industry than either of the other provinces on the Australian mainland. Its wheat and other farm-produce are of the highest quality, and are

largely exported to the neighbouring colony. These articles, together with copper, constitute its commercial resources.

5. WESTERN AUSTRALIA (in so far as its settled portion is concerned) is limited to the south-western corner of the Australian continent, from the neighbourhood of Swan River, on the western coast, to that of King George Sound, on the southern coast-line. It is the least important of the Australian colonies, and, though established in 1829, has hardly more than 15,000 inhabitants. Sheep-farming, and a limited culture of the soil, are the chief pursuits of the settlers.

Western Australia is used by the British government as a convict-establishment, and is the only one of the Australian colonies that is now employed for the purpose.

6. TASMANIA (or Van Diemen's Land, as it was, until recently, called) is an island lying to the south of the Australian continent, and divided from it by Bass Strait. It has an area of twenty-four thousand square miles, which is nearly half the size of England.

Tasmania has a coast-line indented by numerous inlets, and a surface diversified by alternate hills and valleys. Its highest elevations reach five thousand feet above the sea. The two most important of its numerous rivers are the Derwent and the Tamar. The Derwent flows into the estuary of Storm Bay, on the south-east coast. The Tamar flows into Bass Strait, on the north side of the island.

The climate of Tasmania is cooler, and also more humid, than that of the Australian continent, bearing near resemblance to that of the southern coasts of England. Its vegetable produce bears evidence of this. The fruits and vegetables of the English orchard and garden, the apple, gooseberry, and common currant, for which the climate of the Australian mainland is too heated and dry, flourish in Tasmania. The fields and hedge-rows remind the English settler of his native land. The indigenous plants and animals are the same as those of the neighbouring continent.

Coal is found in Tasmania. Iron, copper, lead, and other metals, also occur.

The population of Tasmania exceeds 90,000. Its commercial produce consists principally of wool. Excellent wheat is grown, and the climate is eminently favourable to agricultural operations.

TOWNS.—The principal towns in the above colonies are:—

<i>Colonies.</i>	<i>Towns.</i>
NEW SOUTH WALES.....	Sydney, Newcastle, Bathurst, Goulburn.
QUEENSLAND	Brisbane.
VICTORIA.....	Melbourne, Geelong, Castlemaine.
SOUTH AUSTRALIA	Adelaide, Port Lincoln, Port Elliot.
WESTERN AUSTRALIA.....	Perth, Freemantle.
TASMANIA.....	Hobart-Town, Launceston.

Sydney, which ranks as the Australian metropolis, is the oldest settlement in this region. It was founded in 1788. Sydney stands on the southern shore of Port Jackson, one of the most magnificent of natural harbours, and is a highly-flourishing seat of commerce, with upwards of 100,000 inhabitants. *Newcastle* is at the mouth of the river Hunter, in proximity to the coal-field of New South Wales. *Bathurst*, on the river Macquarie, to the west of the Blue Mountains, is the oldest of the settlements in the interior.

Melbourne, the capital of Victoria, stands near the head of Port Phillip, on the small river Yarra, which runs into that arm of the sea. It has grown with surprising rapidity into a flourishing commercial city, with more than 100,000 inhabitants. *Geelong*, the second place in the province, is at the south-western corner of Port Phillip. The district of Portland Bay, to the westward of Port Phillip, has several flourishing settlements on its shores. New and thriving towns have sprung up in every part of the province of Victoria, which is rapidly advancing in population and wealth.

Adelaide, the chief city of South Australia, lies a few miles from the eastern shore of St Vincent Gulf, and has about 25,000 inhabitants. The mining district of South Australia is to the northward of Adelaide, about ninety miles distant. *Port Lincoln* is at the western entrance of Spencer Gulf. *Port Elliot* is at the mouth of the Murray.

Perth, the capital of Western Australia, stands on the banks of the river Swan. *Freemantle*, its port, is at the mouth of that stream. King George Sound is on the southern coast-line of the province.

Hobart-Town, the capital of Tasmania, is on the river Derwent, a few miles above its entrance into Storm Bay. It was founded in 1804, and has about 25,000 inhabitants. *Launceston*, the second city on the Island, is on the river Tamar, fifty miles above its entrance into Bass Strait.

QUESTIONS ON THE AUSTRALIAN COLONIES.

1. Of what number do the Australian Colonies of Britain consist? Name them, and point to them on the map.
2. Name the mountains, and also the principal rivers, that are within New South Wales.
3. What article constitutes the chief commercial produce of New South Wales? To what country is this exported?
4. Name the chief city of New South Wales. In what year was it founded? Upon what estuary does it stand?
5. In what part of New South Wales is the town of Newcastle situated? The town of Bathurst? Point to each upon the map.
6. What name is given to the colony that lies immediately to the northward of New South Wales? What town forms its capital?
7. Where is Moreton Bay? What river falls into it? Within what colony is it situated?
8. Describe the boundaries of Victoria, pointing to them on the map.
9. By what name was the province of Victoria known prior to 1850? Whence was this name derived?
10. For what article of natural produce is Victoria remarkable? In what year was this discovered?
11. Name the capital of Victoria, and point to it on the map. On what river does it stand? Near the head of what inlet of the sea?
12. Where are Geelong, Castlemaine, and Portland Bay? Point out the localities on the map.
13. Where is South Australia? What two gulfs are within its coast-line?
14. Name the chief town of South Australia, and point it out upon the map.
15. For what articles of produce is South Australia chiefly noted?
16. Where is the colony of Western Australia? What river falls into the sea on its western coast-line? What sound forms part of its southern coast?
17. Name the capital, and the chief port, of Western Australia. On what river do they stand?
18. For what purpose is the colony of Western Australia employed by the home government of Britain?
19. Where is Tasmania? By what name was it formerly called? What strait divides it from the Australian continent?
20. What kind of surface has Tasmania? Name its two chief rivers.
21. In what respect does the climate of Tasmania differ from that of the Australian mainland?
22. What productions of the mineral kingdom are found in Tasmania? In what does its commercial produce principally consist?
23. Name the capital of Tasmania, and point to its place on the map. Also the second town on the island. Say on what river each of them stands.

POLYNESIA.

SITUATION AND EXTENT.—Polynesia embraces the vast multitude of islands that are scattered through the Pacific Ocean. The most northwardly of these is the group of the Sandwich Islands, which are nearly adjacent to the tropic of Cancer. Upon the opposite side of the equator, the most southwardly members of Polynesia reach beyond the 50th parallel, and include the islands of the New Zealand group. In the direction of east and west, the most distant members of this insular region are a hundred and twenty degrees, or a third part of the earth's circumference, apart.

1. **NEW ZEALAND** consists of an extensive group of islands, situated to the southward of the equator, and within the south temperate zone. It embraces two large islands, with a third of much smaller size. The two large islands are divided by Cook Strait, and are distinguished respectively as the North Island and the Middle Island. The Middle Island is divided from Stewart or South Island (as the third island of the group is named) by Foveaux Strait.

The entire area of New Zealand is little less than a hundred thousand square miles, which is considerably greater than the size of England, Wales, and Scotland, united.

High chains of mountains stretch through both the North and the Middle Islands of New Zealand, and reach above the line of perpetual snow. Mount Egmont, in the North Island, is upwards of eight thousand feet, and some of the peaks in the Middle Island exceed nine thousand feet in height. The mountains, especially in the Middle Island, lie nearer the western than the eastern coast. Extensive plains stretch in the latter direction between the mountain-base and the sea, and are, in many cases, well adapted for pastoral pursuits.

Both rivers and lakes are numerous, and the land is throughout abundantly irrigated.

Evidences of volcanic action are found in most parts of New Zealand. Several shocks of earthquake have been experienced, and there are volcanic lakes, with hot springs in their vicinity, in the interior of the North Island.

The climate of New Zealand is temperate and healthy, presenting no material difference from that of England, excepting in a somewhat greater humidity of the air, and in the frequent occurrence of high winds. Its perfectly insular position fully accounts for this. Its indigenous vegetation includes several kinds of valuable timber (chiefly from trees of the pine tribe), but, like that of Australia, though perhaps in a less degree, is deficient in food-plants. New Zealand has neither native grains nor fruits. The taro and the sweet-potato are cultivated as their chief articles of diet by the natives. The native flax (*phormium tenax*) is capable of furnishing a valuable cordage. Animal life is deficient to an extraordinary degree. The hog was the largest quadruped found in New Zealand by the first settlers. The dog, a few rats and mice, and the hog, make up the sum total of the land animals of this extensive region. There are no marsupials.

But the grains, fruits, vegetables, and domestic cattle, of Britain thrive in the plains of New Zealand, the outward aspect of which is becoming rapidly altered under the hands of the settlers. Sheep are reared in great numbers, especially in the province of Canterbury, and wool constitutes an article of export.

New Zealand was colonised by Britain in 1839, and has since remained an appanage of the British Crown. The colonial population numbers about 60,000. There is a considerable native population—estimated at between sixty and seventy thousand, the vastly greater number of whom are found on the North Island.

The native New Zealanders are a totally distinct race from the Australian savage, and possess vastly superior capabilities. They belong to the Malay family of nations, and are a well-formed, muscular race of people, with dark brown complexions. They have been converted to Christianity; but their numbers are decreasing.

The colony of New Zealand is divided into seven provinces, four on the North, and three on the Middle Island. The names of these, with their principal towns, are as follow :—

On the North Island.

AUCKLAND	Auckland.
WELLINGTON	Wellington.
NEW PLYMOUTH.....	New Plymouth.
HAWKE BAY.....	Napier.

On the Middle Island.

NELSON.....	Nelson.
CANTERBURY	Christchurch,
	Lyttelton.
OTAGO	Dunedin.

The town of *Auckland* is the capital of the colony. It stands on a narrow neck of land within the northerly division of the North Island, upon an inlet called the Gulf of Hauraki. *Wellington* is on the east side of Cook Strait, upon the fine harbour of Port Nicholson. *New Plymouth* is near the foot of Mount Egmont, on the west side of the island.

Nelson, the earliest formed of the settlements in the Middle Island, is on the shore of Cook Strait. The province of *Canterbury*, on the east coast of the Middle Island, includes Banks Peninsula, with an extensive pastoral region of the adjacent interior. *Otago*, further to the south, on the same line of coast, is almost exclusively a Scotch settlement.

2. The smaller islands of Polynesia are scattered at distant and unequal intervals over the immense expanse of the Pacific Ocean, both to the north and south of the equator. They are most numerous between the 10th parallel of south latitude and the tropic of Capricorn—that is, within the southern portion of the torrid zone.

The small islands of Polynesia are either of coral or of volcanic formation—the coral islands being by much the more numerous. They consist, with few exceptions, of low reefs, raised only a few feet above the level of the sea, and in many cases hardly on a higher level than that reached by the flood-tide. These islands owe their formation to the labours of the coral-worm, a species of zoophyte, which builds up to the level of the ocean the stoney matter secreted by its own economy. When once the surface of the sea is reached, the coral spreads laterally, but the labours of this most wonderful of Nature's architects are no longer continued in a vertical direction, for water is necessary to its existence. It is found that the coral-worm cannot exist at greater depths than twenty or thirty fathoms, so that the numerous coral reefs of the Pacific and other seas are based upon submarine rocks.

The greater number of the coral islands are of semicircular shape, with a lagoon of still water enclosed between the inner curve of the semicircle and the reef which connects its extremities. A few of them form complete circles, with en-

closed lagoons. One or more openings invariably occur in the reef, through which vessels can enter the lagoon, and ride in safety, while storms rage in the outer ocean.

The volcanic islands of Polynesia reach in many cases a height of several thousand feet above the ocean, and owe their elevation to the agency of subterranean fire. Many of them are surrounded by reefs of coral, which render the approach to their shores a task of danger.

The climate is one of the most delightful in the world. The heat of the torrid zone is here tempered by the influence of the vast surrounding ocean. The thermometer undergoes little variation throughout the year, and an almost uniform serenity of atmosphere prevails. This island-world possesses some productions that are peculiar to itself, chief amongst them the bread-fruit tree, the principal food of the native Polynesian race. The plantain or banana, cocoa-nut, yam, taro, sweet-potato, and arrow-root, are common to this part of the globe with the islands of the Indian seas. The sugarcane, vine, orange, and other fruits of warm latitudes, all flourish. None of the larger members of the animal kingdom are found, with the exception of such domestic cattle as have been introduced by Europeans.

The smaller islands of Polynesia include the following groups, besides a vast number of scattered islets. The three first named of them are to the north, the others to the south, of the equator.

Sandwich Islands.	Society Islands.	Samoa (or Navigators)
Caroline Islands.	Low Archipelago.	Islands.
Ladrone (or Marianne)	Marquesas Islands.	Friendly Islands.
Islands.	Cook (or Hervey) Islds.	Feejee Islands.

In all the above groups, with the exception of the Feejee Islands, the inhabitants are of the Malay or brown race—the same race of mankind as that to which the New Zealanders belong. The inhabitants of the Feejee Islands are of the black, or Austral-Negro race. The numbers of the Polynesian islanders have undergone a rapid decrease since the time when Europeans first became familiar with them, in the latter half of the eighteenth century.

The SANDWICH ISLANDS are among the most considerable of the Polynesian groups, and their position—midway between the Old and New Worlds—is one of great commercial importance. They include eight principal islands, of which

Owhyhee (or Hawaii) is the largest. Owhyhee has an area of 4500 square miles—nearly three-fourths the size of Yorkshire. The population of the whole group numbers about 80,000. They are under the rule of a native king, but are in great measure subordinate to the influence of the United States.

These islands are of volcanic formation, and rise into high mountains in the interior. The highest points of Owhyhee reach nearly 14,000 feet above the sea. The volcano of Kilaueh, in the same island, is perpetually burning.

Considerable commercial intercourse is maintained between the Sandwich Islands and the western ports of the United States. The town of *Honolulu*, on the island of Oahu, is the most frequent resort of shipping.

The LADRONE or MARIANNE ISLANDS are claimed as a possession of the Spanish Crown, but only a few of them are inhabited. They are of volcanic formation, and very fertile.

The SOCIETY ISLANDS are the most important among the smaller groups of southern Polynesia (or the South Sea Islands, as they are often termed). The largest of them is Otaheite (or Tahiti), which has an area of 600 square miles—about the size of the county of Pembroke, in Wales. The highest point of Tahiti reaches 12,000 feet above the sea. All the members of this group are high, and of volcanic formation.

The Society Islands have a native population numbering about 20,000. They are under the rule of a native sovereign, but are subordinate to the French power in these seas.

The LOW ARCHIPELAGO, to the eastward of the Society group, embraces an immense multitude of coral islets and reefs, few of which are inhabited.

Pitcairn Island, a detached rock lying further to the eastward, was the refuge of the mutineers of the "Bounty," who settled on it in 1789. But the inhabitants of Pitcairn were removed to Norfolk Island a few years since (in 1855).

The MARQUESAS ISLANDS are to the north-east of the Society group, and several degrees nearer the equator. They are among the mountainous islands of Polynesia. Their inhabitants are in the lowest condition of savage life, and practise cannibalism. The sovereignty over the Marquesas is claimed by France.

The **SAMOA ISLANDS**, in a more westerly part of Polynesia, are an important group. The largest of them is Savaii, the mountains on which reach upwards of 3000 feet. The inhabitants of the Samoa Islands have been converted to Christianity, and are under a native sovereign.

The **FRIENDLY ISLANDS** lie south-west from the Samoa group. They are for the most part low, and of coral formation, but several of them rise to a considerable height, and one (Tofoa) is an active volcano. The largest of the group is Tongataboo.

These islands are frequently visited for commercial purposes: cocoa-nuts, the bread-fruit, and yams, are plentiful there. They are under a native sovereign, who has been converted to Christianity.

The **FEEJEE ISLANDS** are inhabited by a black race, who are for the most part savages of the worst kind, and are in the practice of cannibalism. They are an extensive group, most of them elevated. The largest is distinguished as Viti-Levu, or Great Feejee.

The eastern islands of the Feejee group have been during some years under the influence of English missionaries, and the sovereignty of the whole group has recently been offered to Britain.

3. The islands that lie further to the westward, like the Feejee archipelago, are inhabited by native races belonging to the Austral-Negro, or Papuan stock. These black tribes of Polynesia are throughout in the lowest condition of savage life. They practise warfare in the most barbarous manner, sacrifice human victims on the altars of their imaginary gods, and are almost uniformly cannibals. The islands included within this division of Polynesia are the following :—

New Hebrides.	Queen Charlotte Islands.	New Ireland.
New Caledonia.	Louisiade Archipelago.	New Hanover.
Loyalty Islands.	New Guinea.	Admiralty Islands.
Solomon Islands.	New Britain.	

New Caledonia is an island of considerable size, above 200 miles in length, and containing about 25,000 native inhabitants. It has been since 1854 a possession of France.

The Loyalty Islands, to the east of New Caledonia, are com-

posed of coral. They are visited for the sake of the sandal-wood which abounds on their shores.

Both the New Hebrides and the Solomon Islands are extensive but little-known groups. The island of Vanikoro (or Manicolo), the largest of the Queen Charlotte group, was the scene of La Perouse's shipwreck, in 1788.

New Guinea, or Papua, is of very large size. Its shores are in many parts lined by high mountains, but the interior is altogether unknown. The Dutch visit portions of its western coasts, as also do the Chinese and the Malays, who obtain thence tortoise-shell, edible birds'-nests, tripang, and other articles. The beautiful birds-of-paradise are native to this region.

QUESTIONS ON POLYNESIA.

1. Point upon the map to the region known as Polynesia. What is the meaning of this name?
2. Where is New Zealand? By what names are its two larger islands distinguished? What strait divides them?
3. Give some account of the physical features of New Zealand.
4. What kind of climate has New Zealand? In what particulars does it differ from that of England?
5. Mention some of the native productions of New Zealand.
6. By what nation has New Zealand been colonised? Since what date?
7. To what division of the human family do the native inhabitants of New Zealand belong?
8. Name the capital of New Zealand, and point out its place on the map.
9. Point on the map to the following towns:—Wellington, Nelson, Christchurch, and New Plymouth.
10. Into what two classes (with reference to their physical formation) are the smaller islands of Polynesia divided?
11. By what agency are the coral islands formed?
12. Say what you know concerning the climate and natural productions of this region. What food-plant is especially characteristic of it?
13. Point to the Sandwich Islands, and name the largest of them.
14. Where are the Caroline Islands? The Ladrões? By what nation is the sovereignty over the latter claimed?
15. Point to the Society Islands, and name the largest of the group.
16. Point on the map to each of the following:—the Low Archipelago, Pitcairn Island, the Marquesas Islands, and the Samoa group. For what is Pitcairn Island noteworthy?
17. Point to the Friendly Islands, and name the largest island of the group.
18. To what stock of nations do the inhabitants of the more westwardly islands of the Pacific (from the Feejee archipelago to New Guinea) belong?
19. Point on the map to the following:—the Feejee Islands, the New Hebrides, New Caledonia, the Loyalty Islands, and the Solomon Islands. To what nation does New Caledonia belong?
20. Where is New Guinea? Name some of the islands that are adjacent to it on the eastward. What articles of commerce does this region furnish?

THE OCEAN.

THE several divisions of the land have been described. It remains to add a brief account of the waters which cover by much the larger portion of the earth's surface—nearly three-fourths of its total extent.

The Ocean comprehends three great natural divisions—the Pacific, Atlantic, and Indian Oceans. To these are added the Arctic and Antarctic Oceans—making, in all, five.*

1.—THE PACIFIC OCEAN.

The Pacific is by much the largest of the oceans, and covers more than a third part of the earth's surface. Its superficial extent is considerably greater than the united area of the several continents. In the direction of north and south—from Behring Strait to the Antarctic Circle—the Pacific stretches through more than 130 degrees of latitude, or upwards of 9000 miles; from east to west—between the 80th meridian west, and the 104th east, of Greenwich—its dimensions are still greater, exceeding 170 equatorial degrees, or above 12,000 miles. An ocean that measures 12,000 linear miles in one direction, and 9000 in another, must of necessity exercise a vast influence over all lesser features of the earth's surface, and is of the highest importance to mankind.

The Pacific is distinguished from the other oceans by its shape, and by the character of its shores. It is a vast oval, the coasts of which, after making near approach in the extreme north, gradually recede towards the direction of the equator, along which line they attain their extremest distance apart. Thence to the southward, they again approximate, though in a much less degree than is the case in the northern

* See page 7.

half of the great ocean. The waters of the southern Pacific stretch, uninterrupted by land, to the line of the Antarctic Circle, and perhaps even to the pole itself.

The Pacific has no inland seas connected with its waters. Its eastern shores exhibit—the Gulf of California excepted—no indentations of the land upon a scale of great magnitude. But its western side displays a feature which is peculiarly characteristic of this ocean, in the range of seas and gulfs which stretch along the coasts of Asia, between the mainland and the neighbouring groups of islands.

The following seas and gulfs, all of them arms of the Pacific, occur along the eastern side of the Asiatic continent :—

Sea of Kamchatka.	Japan Sea.	China Sea.
Sea of Okotsk, or	Yellow Sea.	Gulf of Tonquin.
Kurile Sea.	Gulf of Pe-che-lee.	Gulf of Slam.
Gulf of Tartary.	East Sea.	

The above are not inland seas, like the Mediterranean, the Baltic, or the Red Sea. They are merely extensions of the ocean itself, partially divided from its main body by a succession of island groups. Between these islands there are numerous channels and straits which connect the partially land-locked gulfs of the Pacific with the ocean itself, and with one another.

The Pacific is also distinguished by the numerous coral and volcanic islands scattered over its vast expanse, and described in this volume under the name of Polynesia, as a distinct division of the globe.*

2.—THE ATLANTIC OCEAN.

If the lines of the Arctic and Antarctic circles be taken as marking the limits of the Atlantic in the direction of north and south, its meridional dimensions are the same as those of the Pacific—that is, upwards of 9000 miles. But its proportions in the opposite direction are greatly inferior. Along the line of the northern tropic the Atlantic measures 4500 miles across from east to west. It is there that its opposite shores are at their extreme limits apart. At the equator they are 4200 miles asunder—a space which, great as it is, is

* Pages 337 to 343.

scarcely more than a third of the measure of the Pacific under the same line. Along the 50th parallel, only 2200 miles intervene between the shores of Britain and Newfoundland, and the distance measured along the arc of a great circle between the same points is still less. The distance between the nearest headlands of the African and South American coasts is only 1800 miles.

The Atlantic has the shape of a long valley, winding from north to south, somewhat in the shape of the letter **S**, like the successive curves in the stream of a river. The direction of its coasts upon either side, between the Arctic Circle and the Tropic of Cancer, is from north-east to south-west. Thence to the equator, the direction becomes reversed—or from north-west to south-east. From the easternmost point of Brazil southward, the shores of South America resume the same direction as that of the coasts upon either side of the northern Atlantic—that is, a direction from north-east to south-west.

The Atlantic is distinguished by its inland seas, with their numerous gulfs and other inlets, and the consequent extreme development of coast-line which its basin exhibits. This is characteristic of both its lines of coast, but is more especially so of its eastern than of its western shores.

The inland seas which belong to the eastern side of the Atlantic basin are :—

1. The Mediterranean, which is inclusive of the Black Sea, together with the numerous gulfs and channels belonging to that region, as the Adriatic, &c.
2. The Baltic Sea, which includes the Gulfs of Bothnia, Finland, and others of less size.

The only true inland sea which belongs to the Atlantic basin on its western side is Hudson Bay.

Adding the measure of the Mediterranean and Baltic coasts, with those of Hudson Bay, to the circuit of the outer shores of the Atlantic, the total length of the coast-line which is developed in connexion with the Atlantic waters greatly exceeds the coast-line of the Pacific. The Mediterranean and its gulfs alone have a coast-circuit of more than 13,000 miles.

The Atlantic has, both on its eastern and western side, seas which resemble those of the western Pacific in their character of partial division from its open basin by insular tracts of land. The seas that lie around the shores of Britain, on the one side—the Gulf of St Lawrence, the Mexican Gulf, and

the Caribbean Sea, on the other—are the most prominent examples. Baffin Bay, though situated to the northward of the Arctic Circle, yet belongs rather to the Atlantic basin than to that of the Arctic Ocean.

A circumstance of the highest importance in connexion with the Atlantic (and especially so when regarded conjointly with its extended coast-line) is the fact that most of the great lowland-plains slope towards its basin. By far the larger number of the great rivers are discharged into the Atlantic and its gulfs. The Mississippi, St Lawrence, Amazon, Orinoco, La Plata—the Rhine, Danube, Nile, Niger, and Senegal—are examples.

The greatest depths of the sea hitherto ascertained have been within the Atlantic basin. Soundings taken in the South Atlantic (at a spot about eleven hundred miles east of the La Plata estuary) have been stated to indicate a vertical depth of 46,000 feet, or between eight and nine miles. But it is doubtful whether this result can be regarded as trustworthy. In the North Atlantic, between the parallels of 35° and 40° , immediately south of the great banks of Newfoundland, an ascertained depth of 25,000 feet occurs. This indicates for the bed of the deep sea a depression *below* the surface of its waters which is little inferior to the elevation of the highest points of the land *above* the same level.

3.—THE INDIAN OCEAN.

The Indian Ocean is much smaller than either the Pacific or the Atlantic, and has a marked feature of distinction from either of them in the fact that it is limited by land to the northward. The waters of the two other great oceans stretch to the confines of the frigid zones in either direction, north and south alike. The Indian Ocean is bounded on the northern side by the continent of Asia, and is only open in the direction of the Antarctic Circle. Important consequences in regard to climate and other conditions in the physical geography of the globe ensue from this fact.

Under the line of the equator the Indian Ocean measures little less than 4000 miles across, from east to west: under the tropic of Capricorn this breadth is increased to upwards of 5000 miles.

The Indian Ocean has two inland seas,—the Red Sea and the Persian Gulf. These are of much smaller dimensions than the inland seas which belong to the Atlantic basin, but they possess the true character of land-encompassed bodies of water. The Gulf of Aden, the Gulfs of Cutch and Cambay, the Bay of Bengal, and the Gulf of Martaban, are off-sets of the Indian Ocean, but are neither inland seas, nor land-enclosed gulfs.

The waters of the Indian Ocean are connected with those of the Pacific by the channels which divide the innumerable islands of the East Indian archipelago. The Strait of Malacca and the Strait of Sunda are the two most important of these channels, and lead directly from the Indian Ocean into the China Sea.* Torres Strait, further to the eastward, forms another great channel of connexion between the two oceans.

Neither of the three great oceans has, properly speaking, any defined limit to the southward. Their waters communicate, without interruption from land, in that direction. The Antarctic Circle is assigned, for geographical convenience, as their common line of division from the waters that lie around the southern pole. A line drawn from Cape Horn to the Antarctic Circle is, for a like reason, assigned as the common limit between the waters of the southern Pacific and the southern Atlantic basins. A similar line drawn from Cape Agulhas southward indicates the boundary between the south Atlantic and Indian Oceans, and the meridian which passes through the southernmost headland of Tasmania is regarded as the limit between the basins of the Indian Ocean and the southern Pacific. But these lines have no place in nature, and the term Southern Ocean is commonly applied to the belt of sea which extends (with little interruption from land) round the globe between the parallel of 35° south and the Antarctic Circle. The sea which washes the southern shores of Australia is thus spoken of as the Southern Ocean.†

The ARCTIC OCEAN—looked at either upon the artificial globe, or on a map projected upon the plane of the equator (which alone show its true shape and proportions)—exhibits a

* See page 312.

† See page 325.

circular and nearly land-enclosed basin, common to the northern coasts of Europe, Asia, and North America. It is open to the Atlantic through the broad sea which flows between the shores of Norway and Greenland, upwards of a thousand miles across. It is only connected with the Pacific by Behring Strait, which is less than sixty miles across in its narrowest part.

The principal lesser seas and gulfs which belong to the Arctic basin are—

White Sea	-----on the coast of Europe.
Gulf of Obi) -----on the coast of Asia.
Gulf of Yenesei	
Gulf of Boothia	-----on the coast of North America.

Numerous straits and channels divide the multitude of islands that adjoin the northern and north-eastern coasts of the American continent. The principal of them have been enumerated in page 260.

The Arctic Ocean, and its various ice-encumbered channels, supply the long-sought "North-West passage" between the Atlantic and Pacific, by way of the northern shores of the New World. This passage, after a lapse of three centuries since it was first sought, is now proved to exist. It is, however, useless for purposes of commerce, owing to the vast quantity of ice by which the seas of this region are encumbered, and the consequent perils (if not, as is the case in many seasons, the utter impossibility) of their navigation. Davis Strait, Baffin Bay, Lancaster Sound, Barrow Strait, Melville Sound, the Arctic Ocean, and Behring Strait, form a continuous channel of connexion between the Atlantic and Pacific. This channel, which may be readily traced out upon the map, forms "the North-West passage."

The limits of the Arctic Ocean in the direction of the pole are unknown. The further distance northward to which its shores have been traced is through Smith Sound, at the northern extremity of Baffin Bay. Dr Kane (of the United States Navy) passed two successive winters in the latitude of $78^{\circ} 37'$ (in the years 1853-5), and followed the land further northward to the parallel of $80^{\circ} 53'$. At the furthest point reached, there appeared to be an open sea to the northward.

The most northwardly point on the globe, however, which has hitherto been attained, is that reached by Sir Edward Parry, in 1827, within the sea to the north of Spitzbergen. Parry and his companions here succeeded, by a combined

boat and sledge-passage over the fields of ice, in reaching the latitude of $82^{\circ} 40'$ —within five hundred miles of the pole.

The ANTARCTIC OCEAN has been much less frequently visited than the seas that lie within the northern polar circle, and the space which it covers on the maps is for the most part a blank. Several portions of land have been seen by navigators, at distant intervals, along or near the line of the Antarctic Circle, and have been supposed to form part of an imaginary Antarctic continent. The tract marked as South Shetland (to the southward of Cape Horn) is one of these.

The most extensive region actually visited within the Antarctic Circle, however, is South Victoria, which name was given to a line of coast discovered by Sir James Ross, in 1841. Its shores stretch between the parallels of 70° and 78° south, in a direction lying nearly due southward of New Zealand. Two active volcanoes (the loftier of them, Mount Erebus, estimated at upwards of 12,000 feet) were visible on this dreary and snow-covered region. Sir James Ross succeeded in penetrating, amongst the ice-encumbered seas which adjoin this distant land, as far as the latitude of $78^{\circ} 4'$, which is the nearest approach yet made to the south pole.

EXAMINATION QUESTIONS.

1. Name the three great divisions of the ocean, and point to each upon the map.
2. What are the linear dimensions of the Pacific Ocean, in the direction of north and south? What in the direction of east and west?
3. Name the various seas and gulfs that lie along the western side of the Pacific Ocean, pointing to them on the map.
4. What large inlet is on the eastern coast-line of the Pacific?
5. What are the dimensions of the Atlantic Ocean, from east to west, in its broadest part?
6. In what respect does the shape of the Atlantic differ from that of the Pacific Ocean?
7. By what characteristic is the Atlantic Ocean most strikingly distinguished?
8. What two inland seas belong to the Atlantic on its eastern side? Point them out upon the map.
9. What inland sea has the Atlantic on its western side? By what strait is this sea entered?
10. Name some of the other arms of the Atlantic Ocean (not possessing the character of true inland seas), and point them out upon the map.
11. What important characteristic distinguishes the Atlantic basin with regard to its inland drainage?

12. What is the greatest depth hitherto ascertained in the Atlantic Ocean?
 13. What constitutes the marked feature of distinction between the Indian Ocean and the two other great oceans?
 14. What are the greatest dimensions of the Indian Ocean, in the direction of east and west?
 15. What two inland seas belong to the basin of the Indian Ocean? By what straits are they entered?
 16. Point on the map to the following :—the Gulf of Cutch, the Bay of Bengal, the Gulf of Aden, and the Gulf of Martaban.
 17. What two straits connect the Indian Ocean with the China Sea and the Pacific? Point to them on the map.
 18. By what name is the belt of ocean that stretches round the globe, to the southward of the 35th parallel, known?
 19. What kind of shape has the Arctic Ocean? What continents are washed by its waters?
 20. By what strait is the Arctic Ocean connected with the Pacific? What two continents does this strait divide?
 21. What seas and gulfs belong to the Arctic basin? Point them out on the map.
 22. What straits and channels, belonging to the Arctic basin, require to be passed through in order to make "the North-west passage" between the Atlantic and the Pacific? Trace out this passage on the map.
 23. What is the most northwardly latitude that has hitherto been reached, and by whom was it accomplished? How far distant is it from the pole?
 24. What name has been given to the most extensive tract of land hitherto visited within the Antarctic Ocean? By whom was this land discovered?
 25. What is the highest south latitude hitherto reached?
-

In the preceding chapter we have described the form and extent of the great divisions of the ocean. But this is only one part—and that an elementary one—of the considerations which a complete description of the waters of the globe would involve. The ocean is the theatre of various movements, all of which are important to the people who dwell upon or near its coasts, and in a still higher degree to those who navigate its vast expanse. These movements are manifested in the waves which disturb the level of its surface, in its tides, and in its streams or currents.

The ocean, moreover, exercises a vast influence over climate. Its aqueous particles become transferred, through the medium of evaporation, to the superjacent atmosphere, and, in this form, are carried by the winds over the neighbouring lands, where they are condensed into rain. The comparatively equable temperature of water modifies the extremes of heat and cold to which large tracts of land are subject. Many instances of such results, in reference to the climate of particular

regions, have been given in this volume.* It is hence that the British Islands are free from the extremes of heat and cold which belong to the summers and winters of Eastern Europe, and that the island-world of Polynesia escapes alike the heat and aridity which are the frequent characteristic of tropical lands.

The ocean, like the land and the air, is also the seat of life. Not only is every zone of the ocean tenanted by particular tribes of animated being—with habits and instincts suited to its conditions of temperature and other circumstances—but every succeeding stratum of sea, from the surface downward to a depth of many hundred fathoms, has its special inhabitants. The fisheries that are pursued in many parts of the globe are extensively connected with the industry and commerce of nations. Britain, Holland, Norway, and Newfoundland, are examples of this.†

A complete examination of the topics above adverted to belongs properly to the study of Physical Geography, as a distinct science, and involves a greater amount of detail than can be given to them here. But various illustrations of the intimate connexion which exists between the physical condition of the globe and the intelligent employment of man's industrial faculties have been embodied in the descriptions of different countries. Of the natural phenomena connected with the ocean, none are more important in their bearing upon the industrial and social condition of mankind than the Currents and the Trade-Winds, a brief account of which is hence subjoined.

CURRENTS.

Currents are streams in the ocean. They have often been likened to rivers, and undoubtedly present some analogy to them. But the rivers of the ocean vastly exceed the rivers of the land in their proportions and magnitude. They cover hundreds of thousands of square miles, spreading out to a breadth compared to which even the giant streams of the New World become insignificant.

The cause of currents is to be found in those conditions of

* See page 25; also pages 113, 176, 212.

† See pages 86, 110, 274.

the natural world which produce a disturbance of the general equilibrium of the ocean. These causes are in continual operation, and the ocean-streams which are their result are hence perennial. "There is," says Maury, "a river in the ocean. In the severest droughts it never fails, and in the mightiest floods it never overflows. Its banks and its bottom are of cold water, while its current is of warm. The Gulf of Mexico is its fountain, and its mouth is in the Arctic Seas. It is the Gulf Stream. There is in the world no other such majestic flow of waters. Its current is more rapid than the Mississippi or the Amazon, and its volume more than a thousand times greater." *

1. Difference of temperature, and consequent difference of density, constitute one of the disturbing causes of equilibrium in the great body of the ocean, and are alone sufficient to account for the existence of currents in its waters. Warm water is lighter than cold, and the density of the sea becomes progressively greater with every successive diminution in its temperature.

The warm seas of tropical regions, and the cooler seas of higher latitudes, thus possess different densities. There is hence generated a tendency for the colder and heavier waters of temperate and polar regions to sink towards the lower regions of the ocean, and for the warmer and lighter waters of the torrid zone to spread themselves uniformly over its surface. This tendency is illustrated, on a small scale, by the mingling of oil and water in a vessel. The water, as the heavier of the two fluids, does not attain a state of rest until it has spread uniformly over the bottom of the vessel, while the oil, as the lighter fluid, remains as a layer at the top.

There is thus in constant operation a series of movements in the various particles of the vast fluid mass of which the ocean is composed—the waters of the tropical seas having a movement towards the higher latitudes of the globe, and those of the colder regions exhibiting a compensating motion in the opposite direction.

2. Evaporation is another cause which helps to explain the existence of currents. Evaporation—that is, the conversion of water into vapour, or fluid in its aerial state—proceeds at a vastly greater speed beneath the vertical sun of the tropics than under the cooler influences of higher latitudes. There is (within equal portions of surface) more water abstracted by

* "The Physical Geography of the Sea." By M. F. Maury.

this means from the seas within the torrid zone than from those of the temperate zones, and more from the temperate zones than from the polar seas. The uniform tendency of water to regain a level which (from any cause whatever) has been disturbed, necessitates a flow from the regions where the amount of evaporation is trifling towards those where it is more considerable. The gap which would otherwise be occasioned by the large amount of water drawn up into the air within the warmer latitudes is thus supplied, and the mean level of the ocean is preserved. But the constant agency of currents, flowing from polar towards equatorial latitudes, is involved in this process of compensation.

There are other and minor causes concerned in the production of currents—the varying gravity of different parts of the ocean arising from the greater or less quantity of salt held in solution in its waters, for example. But the great causes are the two above specified. They are expressed by the words *gravity* (as dependent upon temperature), and *evaporation*.

3. The direction of currents is affected by the motion of the earth upon its axis. The *rate* of this motion differs with each succeeding parallel. It is greatest at the equator (where the absolute motion of any given spot is equivalent to a thousand miles per hour), and becomes less and less towards the poles, at which it ceases to exist. Currents proceeding from high latitudes towards the equator are therefore moving in the direction of regions where the earth's rotary motion is *greater* than in the locality of their origin. On the other hand, currents that originate within the tropical seas, and advance towards high latitudes, are moving in a direction which involves a diminished rotary movement—that is, they are advancing towards regions in which the earth's rotation is *less* rapid than in the locality whence they set out.

In either of the above cases, the direction of the advancing current becomes modified by these inherent conditions of its motion. In the former, it becomes deflected to the westward; for the stream, unable to acquire at once the superior velocity, lags behind the earth's general motion, and thus assumes a direction which is in a certain measure contrary to that in which the whole body of the globe is travelling. The resultant direction is thus, in the northern hemisphere, *to the westward of a due southerly course*—that is, to the south-west; in the southern half of the globe, *to the westward of a due northerly course*, or to the north-west.

In the latter of the two cases, that is, in the instance of currents moving from lower to higher latitudes, the advancing stream sets out with a rotary motion which carries it in continual advance of the like motion proper to the portions of the globe towards which it is travelling. The resultant direction is one *to the eastward of due north*, within the northern hemisphere; and *to the eastward of due south* in the opposite half of the globe—that is, towards the north-east, and towards the south-east, instead of due north and south.

There are other causes, of a local nature, which influence the direction of particular currents, as the shape of the land, and the varying depths of the ocean's bed.

The three considerations above adverted to sufficiently account, in a general sense, for the existence of currents, and also for their general courses through the ocean. If the earth, instead of moving on its axis, were perfectly at rest, and if the temperature and other conditions of the ocean were throughout uniform, the equilibrium of the vast mass of water would remain undisturbed, and we should have none of the great ocean-streams which, by their continual motion, preserve the purity of the entire body of sea, transport the productions of one region to the shores of other lands, and a knowledge of which is hence of so much importance to the navigator.

I. THE ATLANTIC OCEAN.—The principal currents of the Atlantic are :—

1. The Gulf Stream, which has a course to the eastward, or from south-west to north-east.
2. The Arctic or Greenland Current, from north to south.
3. The Equatorial Current, from east to west.

1. The Gulf Stream is the most important and powerful of currents. Its name is derived from the fact of its originating in the Gulf of Mexico, whence it issues by the narrow channel of Florida. Its course is thence to the north-eastward, parallel to the shores of the United States. About Cape Hatteras (lat. $35^{\circ} 13'$) it strikes off more to the eastward, and off the great banks of Newfoundland becomes nearly due east. It then crosses the Atlantic Ocean in the direction of the European continent, gradually becoming more and more mingled with the general waters of the ocean as it approaches the neighbourhood of the Azores.

The Gulf Stream is throughout distinguished by the supe-

rior warmth of its waters, compared with the temperature of the adjoining ocean. The difference amounts to as much as 20°, and sometimes even 30°. It is, in fact, a vast river of warm water, flowing between banks of cooler water on either hand. The velocity of the current is greatest in the commencing or narrower portion of its course, and gradually diminishes as its volume of water spreads out to wider proportions—that is, as its breadth becomes increased. As far out from the Gulf of Mexico as the coasts of Carolina, the waters of the current are of an indigo blue, and are readily distinguishable in appearance from the common sea-water, which is of a pale green.

2. The Arctic or Greenland Current is a stream of cold water, and produces effects upon climate precisely the reverse of those that ensue from the Gulf Stream. It flows along the coasts of Labrador and Newfoundland, with a southwardly course, and brings down the cold water and the vast floating icebergs of Baffin Bay into the western parts of the Atlantic.

3. The Equatorial Current of the Atlantic crosses the ocean from east to west, in the immediate neighbourhood of the equator—that is, it flows from the coasts of Western (or rather south-western) Africa towards those of South America. On approaching the latter, a branch of it (known as the Brazilian Current) leaves the main stream, and flows in a south-westerly direction along the shores of Brazil.

II. THE INDIAN OCEAN.—The principal currents of the Indian Ocean are :—

1. The Equatorial Current, from east to west.
2. The Agulhas Current.

1. The Equatorial Current of this ocean consists in a general flow of its tropical waters to the westward. Towards the neighbourhood of the African coasts, the land deflects the stream in a southwardly direction, parallel to the shores of Eastern Africa.

2. The Agulhas Current is so called from Cape Agulhas, the southernmost extremity of Africa. It originates in the Indian Ocean, and is (in its origin) an extension of the Equatorial Current. Two streams which flow on the opposite sides of the island of Madagascar unite, and the current then sets round Cape Agulhas, to the westward—that is, from the

Indian into the Atlantic Ocean. The banks of Agulhas, however, deflect a portion of the stream, and form a returning current, which re-enters the Indian Ocean in a more southerly latitude, and has a course to the eastward.

III. THE PACIFIC OCEAN.—The principal currents of the Pacific Ocean are :—

1. The Equatorial Current, from east to west.
2. The Peruvian Current, from south to north.
3. The Japanese (or China) Current, from west to east.

1. The waters of the Pacific, in the neighbourhood of the equator, like those of the Atlantic and Indian Oceans, have a general flow to the westward.

2. The Peruvian Current is a stream of cold water, which originates in the high latitudes of the southern Pacific, and derives thence its low temperature, comparatively to the adjoining ocean. It flows along the coasts of Chili and Peru, in a northwardly direction.

3. The Japanese (or China) Current has been supposed to correspond, in the northern half of the Pacific, to the Gulf Stream of the North Atlantic Ocean. Much less is known about it, however, than is known of the latter. The Japanese Current flows to the eastward, past the shores of Japan, and thence appears to cross the ocean in an eastwardly direction.

A current sets through Behring Strait, from the Pacific into the Arctic Ocean.

Regarding the ocean as a whole, it is obvious that all its movements are, in a greater or less degree, connected with one another. The currents of one ocean, in most cases, if not in every instance, are continuous with those of the other oceans. The general direction of the waters, within the tropical latitudes, is *to the westward*: within the temperate latitudes, the direction is the reverse, or *to the eastward*. In the higher latitudes, the direction is, in either hemisphere, *from the pole towards the equator*.

The Mediterranean Sea has a constant current setting into it from the Atlantic, through the Strait of Gibraltar. The water thus continually added to its contents is carried off by evaporation from its surface. A current from the Black Sea

also passes, through the Channel of Constantinople and the Dardanelles, into the Mediterranean.

TRADE-WINDS.

The Trade-Winds are constant currents of air, which blow within certain latitudes of the ocean. They are connected with the laws by which climate is regulated, and are of the highest importance to the navigator.

In the northern half of the Atlantic and Pacific Oceans, from within a few degrees of the equator to about the 30th parallel, the trade-wind is a *north-east wind*—that is, a wind blowing from the north-east quarter of the heavens.

In the southern half of the Atlantic and Pacific Oceans, within similar latitudes (from the neighbourhood of the equator to the 30th parallel), the trade-wind is a *south-east wind*—that is, a wind blowing from the south-eastward.

The trade-winds of the North Atlantic and Pacific Oceans, and the similar winds of the South Atlantic and Pacific, do not meet, but are divided by a narrow belt, within which the atmosphere is characterised by a prevailing stillness, and which is hence called the Zone of Calms. This zone has, on the average, a breadth of three or four degrees, and it lies, for the most part, to the northward of the equator, though nowhere far removed from that line.

The explanation of the trade-winds is analogous to that of the oceanic currents. They result from differences in the temperature of the atmosphere, and their direction (as in the case of the currents of the ocean within similar latitudes) is in part determined by the rotation of the earth upon its axis. If the whole body of air by which the earth (land and water alike) is enveloped, possessed uniformity of temperature, accompanied by an equal distribution of moisture throughout, at similar elevations, and if the earth were at rest, there would be no disturbance of a general condition of equilibrium, and there would consequently be no winds. Neither the one nor the other of these conditions, however, obtains. The causes which disturb atmospheric equilibrium are numerous, and every such disturbance produces a current of air—that is, a wind. Over the land, these causes of disturbance vary with every condition of local formation, as to

mountains, deserts, inland waters, and other features. The higher regions of the land constitute great areas of condensation, within which the vapours contained in the atmosphere are discharged in copious rains. The partial vacuum thus created is filled by currents of air directed from surrounding localities towards such regions. The amount of this discharge of rain varies with the season of the year, and with other contingencies. From such causes proceed the frequent changes of direction which characterise winds that blow over areas of land, or on the seaward borders of maritime countries—changes which it is perhaps impossible to reduce to general laws. It is only over the vast expanse of water, where nothing interferes with the normal movements of the atmospheric currents, that uniformity in their direction can be looked for.

The prime cause of the trade-winds is found in the difference of temperature between the atmosphere within the tropics and in the higher latitudes of the globe. Hot air is specifically lighter than cold air, and has hence a tendency to rise into the higher strata of the atmosphere. As the warm air of intra-tropical regions rises, the cooler air of temperate and polar latitudes flows towards the equator, to supply the place of the ascending currents of the torrid zone. The cause of superior warmth within the tropical latitudes (that is, the greater solar heat of those parts of the globe) is in constant operation, and the result is hence equally constant. There is thus a constant ascent of warm (and therefore light) air within the warmer portions of the earth, and a constant current of cooler air setting towards those portions of the globe from the temperate latitudes of either hemisphere. These currents of air, which, were the globe at rest, would have a direction coincident with the meridian (that is, a direction from north to south in the northern hemisphere, and from south to north in the opposite half of the globe), become deflected from their normal course by the varying speed of the earth's rotation in different parallels—in the same manner as the currents of the ocean, under like circumstances.* The wind on the northern side of the equator, instead of a north, becomes a north-east wind; that on the south side of the equator is converted from a south into a south-east wind.

The ascending currents of warm air pass, in the higher strata of the atmosphere, from the equatorial towards the higher latitudes, and, after losing their superior heat in these

* Page 354.

elevated regions, descend to the surface of the earth within the temperate latitudes of either hemisphere—replacing the portions of air which have been abstracted thence by the process already described. There is thus a constant circuit of atmospheric currents, which results in a continual interchange between the aerial covering of the different zones. The returning currents of air from the intra-tropical regions—moving in the one hemisphere, from south to north, and in the other, from north to south—become deflected by the earth's axial rotation into south-west winds in the northern half of the globe, and north-west winds in the southern hemisphere. They are, in fact, the prevailing westerly winds of the north and south temperate zones.

The prevalence of calms in the immediate neighbourhood of the equator is capable of ready explanation. For a few degrees upon either side of the line, the temperature is almost uniform—being, in fact, unvaryingly hot. There is no disturbing cause (in so far as temperature only is concerned), and hence the general equilibrium is maintained—or, in other words, there is no wind. The air is almost uniformly calm, the sky bright and clear. But with every successive degree of departure from the equator of temperature, the diminution of heat becomes more strongly marked, and, as the differences of temperature between adjacent portions of the whole body of air become more distinct, so are the causes which occasion winds more powerfully called into operation. The general stillness of the air within equatorial latitudes is, however, occasionally interrupted by violent storms, in the origin of which electricity is probably the principal agent.

In the Indian Ocean, and the adjacent China Sea, in place of the trade-winds of the other oceans, there prevail periodical winds, or *Monsoons*.* The monsoons blow for half the year from one direction, and for the other half from an opposite quarter of the heavens.

The explanation of the monsoons is found in the fact that the Indian Ocean is shut in to the northward by land, instead of stretching, like the Atlantic and Pacific, into high northern as well as southern latitudes. The heating influence of the sun over the masses of land which enclose the Indian Ocean upon three sides reverses the currents of air that blow over its waters, according as the sun is vertically over the northern

* See pages 154 and 183.

or the southern half of the torrid zone. When the sun is to the southward of the equator, the wind which blows over the northern half of the Indian Ocean is from the north-east—that is, the north-east monsoon, which is equivalent to the trade-wind of the other oceans within similar latitudes. But during the summer of the northern hemisphere, the vertical rays of the sun occasion an intense degree of heat over the mainland of southern and south-eastern Asia: the heated air over the land rises (from its superior rarity), and a current of cooler air from the neighbouring ocean is occasioned. This current is the south-west monsoon, which lasts while the originating cause is in operation—that is, while the sun is to the northward of the equator.

The precise direction of the monsoon varies in great measure according to local circumstances. Upon the north-western shores of the Australian continent, the summer monsoon (that is, the monsoon which blows during the summer of the southern hemisphere, or from October to March) is a north-west wind—set in motion by the intense heat then generated by the rays of a vertical sun over that portion of the land. With the return of the sun to the northern side of the equator, the ordinary south-east trade-wind of the southern tropic resumes its place. Within the Red Sea, the monsoons follow the general direction of its valley.

EXAMINATION QUESTIONS.

1. What kind of influence does the ocean exert upon climate? Give some examples of this, in the case of particular countries.
2. What are Currents? To what features in the geography of the land do they bear analogy?
3. To what two principal causes may currents be attributed?
4. In what way does difference of temperature tend to produce currents?
5. In what way is evaporation an agent in their production?
6. In what way is the direction of currents affected by the motion of the earth upon its axis?
7. Name the three principal currents of the Atlantic Ocean, stating the general direction of each.
8. Where does the Gulf Stream originate? Trace out its general course upon the Map of the World.
9. By what circumstances is the Gulf Stream distinguished from the ocean in its vicinity?
10. What effects do the Gulf Stream, and the Greenland Current, respectively produce upon climate?
11. Name the two principal currents of the Indian Ocean, marking out their general directions on the map.
12. Name the principal currents of the Pacific Ocean, and state their general direction.

13. By what condition, as to temperature, is the Peruvian Current distinguished? Can you account for this?
14. A current flows through the Strait of Gibraltar: what is its direction? Into the Mediterranean, or the reverse?
15. What are the Trade-winds? Within what oceans are they experienced?
16. From what quarter of the heavens does the trade-wind of the northern hemisphere blow? From what quarter the similar wind of the southern hemisphere?
17. What separates the trade-winds of the opposite hemispheres?
18. To what causes may the trade-winds be ascribed?
19. Why are not similar winds experienced over the land, within the same parallels?
20. How may the general prevalence of calms in the neighbourhood of the equator be accounted for?
21. In what respect do the monsoons of the Indian Ocean differ from the trade-winds of the Atlantic and Pacific?
22. How are the monsoons accounted for?

THE END.

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